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COMMONWEALTH OF PENNSYLVANIA.

DEPARTMENT OF HEALTH.

MANUAL

FOR THE GUIDANCE OF

COUNTY MEDICAL INSPECTORS

AND FOR THOSE ACTING AS

STATE HEALTH OFFICERS.

SAMUEL G. DIXON, Commissioner of Health.

HARRISBURG PUBLISHING CO., STATE PRINTER.
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DUTIES OF COUNTY MEDICAL INSPECTORS.

The relationship of the County Medical Inspector to the Department of Health is that of a consultant, to be called upon to diagnose doubtful cases, to investigate epidemics, to vaccinate school children when requested by the Commissioner, to visit in person or appoint a deputy to visit cases of eruptive diseases or suspicious throat conditions when there is no physician in attendance, and to order such enforcement of any regulations of the Department of Health as may be necessary to protect the public health. When necessary he shall appoint quarantine guards whose pay shall be not over \$2.00 per day.

The County Medical Inspector shall on the ²⁰~~first~~ of each month make a report of the health conditions in his county ~~accompanied by the morbidity reports received from Health Officers,~~ together with any suggestions that may occur to him whereby the general health of the community may be conserved. *Form 36 & 37 mailed to him following*

It shall be the duty of the County Medical Inspector to report any negligence on the part of Health Officers in the performance of their duties and to forward to the Department information which he may obtain concerning any violation of quarantine regulations, failure on the part of physicians to report cases of communicable disease or neglect on the part of ministers, nurses, school teachers and undertakers to comply with the rules and regulations prescribed by the Department of Health to be observed by them when coming in contact with communicable disease.

Any case of smallpox which occurs beyond the corporate

limits of any city or borough must be immediately reported by the attending physician to the County Medical Inspector of the county in which the case is found. On receipt of such notification by a physician or Health Officer the County Medical Inspector shall immediately visit the premises, search out all those who have been exposed to the disease, and vaccinate them or if they refuse to be vaccinated, disinfect them and place them under absolute quarantine. The Inspector shall, after disinfection and vaccination, use his judgment as to paroling those who have been with the patient except those who have been in personal contact with the small-pox patient after the appearance of the eruption. A full history of each case must be immediately reported to the Department by the Inspector, such history to include the name, age, occupation, nationality, probable source of the infection and character of conveyance, with mention of any route over which the case has traveled. Upon the recovery of such patient and after the expiration of the quarantine period it shall be the duty of the County Medical Inspector to personally examine those under quarantine in order to determine the advisability of releasing them. Those who have been successfully vaccinated may after the expiration of ten days be released, having first been personally disinfected, but those who have not been recently vaccinated shall not be released until the expiration of the incubation period of eighteen days from date of last exposure.

School children residing in rural districts upon whom two unsuccessful attempts at vaccination have been made and certified to by a physician, before being admitted to school shall be vaccinated without cost by or in the presence of the County Medical Inspector or a physician deputized by him for the purpose. Following such attempt an order shall be issued on ~~vaccination form~~ No. 10 by the County Medical Inspector or his deputy, ~~requiring~~ the admission of the child to school; such order to be valid for the period of one year only. Such cases occurring within

see special Form suggesting

the corporate limits of a city or borough shall be referred to their respective Boards of Health. It shall be the duty of the County Medical Inspector, or his deputy when so notified, to examine all school children who in the opinion of the attending physician are not in such physical condition as would justify the performance of vaccination, and if, in the opinion of the County Medical Inspector vaccination is inadvisable, an order shall be issued by him ~~on~~ *suggesti* ~~vaccination form No. 10~~ requiring the admission of the child to school; such order to be valid for the period of one year only. Such cases occurring within the corporate limits of a city or borough shall be referred to their respective Boards of Health. Upon the receipt of a report from a Health Officer that Smallpox, Scarlet fever, Diphtheria, Cerebrospinal Meningitis (Spotted fever), Measles or Mumps has made its appearance in a school, the County Medical Inspector shall have such school closed until the premises have been thoroughly disinfected.

Whenever it becomes known to the County Medical Inspector that any person or persons suffering from Smallpox, Diphtheria, Scarlet fever, Cerebrospinal Meningitis (Spotted fever), or Measles have visited any school he shall report the same to the Department of Health at once with the date of such visit and shall have such school closed until the premises have been thoroughly disinfected.

Following report by a Health Officer of the collection and marketing of milk or milk products from premises on which any of the following diseases exist: Diphtheria, Scarlet fever Smallpox, Typhoid fever, or Epidemic Cerebrospinal Meningitis (Spotted fever), it shall be the duty of the County Medical Inspector to make an immediate investigation and report his findings to the Department of Health. He shall see that the patient is properly isolated and that all possible precautions against the transmission of the infective agent from the sick room are being observed. Those engaged in the production of milk or milk products, or in the cleansing or care of utensils used for this purpose, must

be disinfected, together with their clothing and required to keep out of the infected house until a certificate of recovery or death has been issued by the physician in charge, and a certificate of disinfection has been granted by the Health Officer.

Unless such precautions are observed, the County Medical Inspector shall order that the proprietors and their agents shall either discontinue the marketing of milk and milk products or shall arrange for the transfer of the stock to other premises free from the above mentioned diseases.

DUTIES OF HEALTH OFFICERS.

The relation of the Health Officer to the Department of Health is that of a Sanitary Agent, whose duties are to placard premises where communicable diseases have been reported by a physician; to establish quarantine in manner and form prescribed by the regulations of the Department; to furnish the householder with circulars governing the care of the disease reported; to disinfect, raise quarantine and remove placards when instructed by the County Medical Inspector, or the attending physician when so indicated in the detailed instructions given for the various diseases, and to disinfect premises upon which Pneumonia or Tuberculosis has recently existed, when notified by the attending physician or householder.

It shall be the duty of the Health Officer to forward to the Department any information which he may obtain concerning violation of quarantine regulations, failure on the part of physicians to report cases of communicable diseases; or any neglect on the part of Ministers, Nurses, School-teachers and Undertakers to comply with the rules and regulations prescribed by the Department of Health to be observed by them when coming in contact with communicable diseases.

The Health Officer shall report to the Department of Health the names and addresses of householders harboring cases of communicable disease (Bubonic Plague, Chicken-pox, Cholera, Diphtheria, Leprosy, Measles, Scarlet fever,

Smallpox, Whoopingcough or Yellow fever) imported to their localities, including the name and address of the householder from whose house the patient came, together with mode of transportation. Whenever it becomes known to the Health Officer that any person or persons suffering from Smallpox, Diphtheria, Scarlet fever, Epidemic Cerebrospinal Meningitis or Measles have visited any church, school, theatre, R. R. station or other localities or places of public gathering, he shall report the same to the County Medical Inspector, together with the date of such visit and the means of conveyance.

On receipt of a report of a case of communicable disease, the Health Officer will make a copy of the data written thereon, after which the card must be restamped, re-addressed and mailed to the Department of Health, Harrisburg, without delay.

Following his first visit to the infected premises he will report to the County Medical Inspector what he has done on the farm supplied for the purpose.

The Health Officer's monthly report shall include a list of all cards remailed to Harrisburg.

The following diseases shall be placarded and dated:

Bubonic Plague.	Scarlet fever.
Cerebrospinal Meningitis.	Smallpox.
Chickenpox.	Typhoid fever.
Cholera.	Typhus fever.
Diphtheria.	Whoopingcough.
Leprosy.	Yellow fever.
Measles.	
Mumps.	
Relapsing fever.	

The following diseases require absolute quarantine:

Bubonic Plague.	Smallpox.
Cholera.	Typhus fever.
Leprosy.	Yellow fever.

Absolute Quarantine includes first, absolute prohibition of entrance to or exit from the building or conveyance ex-

cept by officers or attendants authorized by the health authorities, and the placing of guards if necessary to enforce this prohibition; second, the posting of a warning placard which states the name of the disease, in a conspicuous place or places on the outside of the building or conveyance; third, the prohibition of the passing out of any object or material from the quarantined house or conveyance; fourth, provision for conveying the necessities of life under careful restriction to those in quarantine.

Since these diseases, with the exception of smallpox, rarely occur in this Commonwealth, when reported, special instructions will be issued by the Department of Health, governing the individual cases.

The following diseases require modified quarantine, (absolute upon violation of modified quarantine):

Epidemic Cerebrospinal Men-	Scarlet fever.
ingitis (Spotted fever).	Whoopingcough.
Diphtheria.	Relapsing fever.
Measles.	

Modified Quarantine includes, first, prohibition of entrance and exit as in absolute quarantine except in the case of certain members of the family authorized by the health authorities to pass in and out under certain definite restrictions; second, the placing of a placard as before; third, isolation of patient and attendant; fourth, prohibition of the carrying out of any object or material unless the same shall have been thoroughly disinfected. The wage earner is allowed, under modified quarantine, to continue work provided he at no time comes in contact with the patient. and that he has a room entirely separated from the patient and those attending the same, as provided in instructions on isolation. In permitting householders and wage earners to continue work when cases of Diphtheria, Scarlet fever, Epidemic Cerebrospinal Meningitis (Spotted fever), or Measles appear upon the premises, the greatest care should be taken to prevent the carrying of the infection and such a person shall not be employed in an establishment in

which is conducted the production, sale or manufacture of fabrics, wearing apparel, upholstered furniture, bedding, food stuffs, cigars, cigarettes, candy, etc. If so employed he should leave the premises after taking an antiseptic bath and having his clothing disinfected and thereafter remain away from the premises up to the time of the recovery of the last patient and the disinfection of the household.

Quarantine permits are required and shall be issued by the Health Officer in the following diseases:

Epidemic Cerebrospinal Men-	Measles.
ingitis (Spotted fever).	Scarlet fever.
Diphtheria.	Relapsing fever.

When he learns of the existence of any eruptive disease or suspicious sore throat not under the care of a physician he shall report the same to the County Medical Inspector at once.

Smallpox. On receiving notice of the existence of a case of smallpox, the Health Officer shall immediately place one or more placards bearing the name of the disease in a conspicuous place or places upon the premises within which the disease exists. He shall see that necessary guards are so placed that none other than the attending physician and those presenting a quarantine permit shall either enter or leave the premises, and that no article whatsoever shall be removed except by and with the consent of the County Medical Inspector, and he shall see that the householder or wage earner is provided with circular No. 13, which sets forth in detail the precautions to be observed in cases of smallpox.

When maintenance for those in quarantine becomes necessary, the Health Officer shall legally notify the proper authorities, (See blank "Order of Relief" appendix). He shall obtain all possible information with regard to the location of those who have been exposed, reporting the facts to the County Medical Inspector, and if necessary or if so requested, he shall furnish all possible assistance in apprehending

or quarantining such persons. It shall also be the duty of the Health Officer to see that quarantine is being observed in accordance with the foregoing instructions. Upon the written order of the County Medical Inspector he shall lift quarantine. Under no circumstances however, shall quarantine be lifted prior to a thorough disinfection of persons and premises as directed in circulars No. 13 and 6. The Health Officer shall keep the County Medical Inspector informed of developments as learned from the attending physician. In the event of death it shall be the duty of the Health Officer to see that the funeral of such person is strictly private and that burial is made within thirty-six (36) hours after death, unless special permission extending the time shall have been granted by the County Medical Inspector.

Typhoid Fever. On receiving notice of the existence of a case of Typhoid fever the Health Officer shall place one or more placards bearing the name of the disease in a conspicuous place or places upon the premises within which the disease appears. He shall see that the householder is provided with circular No. 2 which sets forth the precautions to be observed. The Health Officer shall see that the following provisions are made for the disinfection and safe disposal of all excreta from the patient. If the disinfected discharges from the sick are deposited in a privy or privy vault it shall be inspected and if this is found to be overflowing or located in a position to receive surface drainage, the householder shall be required to cleanse and disinfect the same (See disinfection of privy vaults and circular No. 2) and to dig a trench at least 3 feet deep for such discharges, placing in the bottom of it 2 inches of freshly burned unslaked lime. When the trench becomes filled to within one foot of the surface of the ground its contents should be covered with 2 inches of freshly burned unslaked lime and then filled with clean soil and another dug. Such a trench should not be dug within 100 feet of a stream, well, pond, spring or body of water

or where its contents would be liable to be washed out by surface drainage. The trench should be kept so covered as to keep out rain and flies.

Where the water supply of the household is obtained from a well, its location and construction should be investigated in view of its possible pollution from surface or subsoil drainage from privy vaults, pigsties or barnyards. Dug wells with defective masonry, inadequate covering, or leaky platforms without drain boards frequently become polluted by drainage either through the walls or from polluted matter deposited on such platforms.

When typhoid fever appears on any premises from which milk is sold the Health Officer shall at once report the same to the County Medical Inspector.

Scarlet Fever. On receiving notice of the existence of a case of scarlet fever the Health Officer shall place one or more placards in a conspicuous place or places upon the premises. He shall see that the householder or wage-earner is provided with circular No. 4 which sets forth in detail the precautions to be observed.

The householder may continue work under certain definite restrictions as detailed under modified quarantine, and should be notified that none except those so authorized shall enter or leave the premises prior to the removal of quarantine. In families where there are children of school age he shall inform the householder that the law requires that no member of the household shall attend school until thirty (30) days shall have elapsed after recovery, death or removal of the last person affected and the disinfection of the premises.

The Health Officer shall lift quarantine under the following conditions: First, in case of recovery, upon a written request from the attending physician stating that desquamation has entirely ceased, provided thirty (30) days have elapsed from the date of onset of the disease. Second, in the event of death or removal of the last case on the premises, provided a period of ten (10) days shall have elapsed

from the date of exposure of others in the household, without symptoms of the disease appearing. But under no circumstances shall quarantine be lifted prior to a thorough disinfection of persons and premises as directed in circulars No. 4 and No. 6.

In the event of death the Health Officer shall see that burial takes place within thirty-six (36) hours, and the head of the family shall be warned that the funeral must be strictly private attended only by the immediate adult relatives of the deceased, the necessary number of adult pallbearers and the officiating clergyman.

Diphtheria. On receiving notice of the existence of a case of Diphtheria the Health Officer shall place one or more placards in a conspicuous place or places upon the premises within which the disease exists and he shall see that the householder or wage earner is provided with circular No. 3 which sets forth in detail the precautions to be observed.

The householder or wage earner may continue work under certain definite restrictions as detailed under modified quarantine and should be informed that none except those so authorized shall enter or leave the premises prior to the removal of quarantine.

In families where there are children of school age he shall inform the householder or wage earner that the law requires that no member of the household shall attend school until thirty (30) days shall have elapsed after recovery, death or removal of the last person affected and the disinfection of the premises.

The Health Officer upon the written request of the attending physician shall lift the quarantine under the following conditions: First, Expiration of twenty-one (21) days from the date of onset of the disease, or fourteen (14) days, where two negative cultures have been obtained from the diseased area on successive days. Second, Or in the event of death or removal of the last case on the premises, provided a period of ten (10) days shall have elapsed from the date

of exposure of others in the household, without symptoms of the disease appearing. But under no circumstances shall quarantine be lifted prior to a thorough disinfection of persons and premises as directed in circulars No. 3 and No. 6.

In the event of death he shall see that burial takes place within thirty-six (36) hours, and the Health Officer shall warn the head of the family that the funeral must be strictly private, attended only by the immediate adult relatives, the necessary number of adult pallbearers and the officiating clergyman.

Epidemic Cerebrospinal Meningitis—(Spotted Fever.) On receiving notice of the existence of a case of Epidemic Cerebrospinal Meningitis (Spotted fever) the Health Officer shall place one or more placards in a conspicuous place or places upon the premises, and shall see that the householder is provided with circular No. 5 which sets forth in detail the precautions to be observed.

The householder may continue work under certain definite restrictions as detailed under modified quarantine, and should be notified that none except those so authorized shall enter or leave the premises prior to the removal of quarantine. In families where there are children of school age he shall inform the householder that no member of the household shall attend school during the illness of the patient.

The Health Officer, upon the written request of the attending physician, shall lift quarantine under the following conditions: First, in case of recovery, second, in the event of death or removal of the last case on the premises provided a period of seven days shall have elapsed from the date of exposure of others in the household without symptoms of the disease appearing. But under no circumstances shall quarantine be lifted prior to a thorough disinfection of persons and premises as directed in circulars 5 and 6.

In the event of death the Health Officer shall see that

burial takes place within thirty-six (36) hours, and he shall warn the head of the family that the funeral must be strictly private, attended only by the immediate adult relatives, the necessary number of adult pallbearers and the officiating clergyman.

Chickenpox, Measles, Mumps and Whoopingcough. On receiving notice of the existence of a case of Chickenpox, Measles, Mumps or Whoopingcough, the Health Officer shall place one or more placards bearing the name of the disease in a conspicuous place or places upon the premises within which the disease has appeared.

Quarantine is not enforced in any of the above mentioned diseases except Measels, in which modified quarantine should be observed. The patient is simply isolated, but the Health Officer shall instruct the householder that the children should be kept on their own premises during the period of school exclusion. No person suffering from any of the above diseases will be permitted to attend school prior to recovery. Other persons of such a household may return to school, if well, at the expiration of twenty-one (21) days from the date of the last exposure, readmission to be upon the certificate of the attending physician attesting to their recovery, or freedom from infection. Health Officers will give the school authorities such instructions as to school exclusion after the placarding of the premises, and will attend to the necessary disinfection after recovery or death. In the event of death from any of the above diseases the funeral must be private.

School Exclusions. Following the placarding for Epidemic Cerebrospinal Meningitis (Spotted fever), Smallpox (Variola or Varioloid), Scarlet fever (Scarlet rash), Diphtheria (Diphtheritic croup or Membranous croup) or any disease requiring absolute quarantine, (See circular No. 8), it shall be the duty of the Health Officer to ascertain the school attended by any child from infected premises, and to serve a written notice upon those in charge of such schools, requiring the exclusion from school of all persons belonging to or residing with the family or residing in the same

house in which the person suffering from any of the afore-said diseases may be located, until a physician's health certificate is presented stating that all the regulations of the Health Department have been fulfilled. (See instructions given for the various diseases).

Libraries and Circulating Libraries shall be notified not to grant applications for books from those residing on infected premises.

Destruction of Books. School or Public Library books found on premises within which any of the diseases mentioned in pages 7 and 8 exists shall be destroyed by burning prior to the disinfection of the premises.

Schools, Closing Of. When it is reported that Smallpox, Scarlet fever, Diphtheria, Cerebrospinal Meningitis (Spotted fever), Measles, Mumps, Chickenpox or Whoopingcough has appeared in a school the Health Officer must immediately report the same to the County Medical Inspector, who shall order the school closed until the premises have been thoroughly disinfected. Verbal or written notice shall be given the president, principal or other person in charge of the school, and the Secretary of the School Board in question stating the facts in the case necessitating such action on the part of the School Board and he shall also deliver into the hands of said Official, Department circular No. 10, which describes in detail the method of disinfection of such buildings and their contents.

School Inspection. It shall be the duty of Health Officers to investigate the sanitary condition of each of the public schools within their jurisdiction at least twice during the year.

The first report should note the general condition of the cellar, and yard, and the source of the water supplied to the school, noting the possibility of pollution by drainage from privy vaults, pigsties, barn or chicken yards, etc. If from a well, he should note whether it is covered, the condition of the platform, especially as regards the possibility of water running back into the well either as the result of a leaky platform without a suitable drain board or from

lack of provision for drainage away from the well. He should note the appearance, odor and taste of the water.

The Health Officer shall examine the school register and report to the Department of Health the names of such pupils and the names and Post Office addresses of parents or guardians of such pupils as have been refused admission to school for noncompliance with the vaccination law. Where it is found that teachers have admitted unvaccinated pupils without a certificate authorized by the health authorities, notice shall be given the teacher that he or she has violated the law of the Commonwealth. A detailed report of such violation shall be promptly forwarded to the Department of Health, which report shall include the name and Post Office address of both the teacher and School Directors.

The condition of the water closets and privy vaults should be especially noticed. Should a privy vault be full, permitting of overflow or drainage, he should order that the contents of such vault be removed. Should the accumulated excrement be particularly offensive, although the need of emptying the vault be not apparent, the contents should be disinfected (See disinfection of privy vaults). Privy vaults should be constructed so that they cannot receive surface drainage. The walls within and without, together with the dividing fences, should be kept clean.

Nuisances. It shall be the duty of the Health Officer to report to the Department any alleged nuisances.

Bone Boiling Establishments, Rendering Works and Depositories of Dead Animals. When inspecting bone boiling establishments or depositories of dead animals, he shall note the location and character of the building and inspect the methods for conducting such business. He shall pay especial attention to the provisions made for the disposal of offal and for the prevention of noxious odors and gases. He shall determine the condition of the machinery, appliances and water supply, noting the general cleanliness of the plant. The location shall be remote from a closely

inhabited neighborhood, and such as to permit of an adequate water supply for the purpose of maintaining cleanliness. The building shall be walled in and provided with smoke consumers and the floor of such establishment must be constructed of some impermeable material.

The boiling or drying of bones or the boiling of dead animals shall be so conducted as to prevent or counteract any offensive effluvia. Offensive accumulation of carcasses, bones and offal must not be permitted to remain in the yards of such establishment and a sufficient quantity of quick lime or other efficient deodorizer must be applied to the same during the months of June, July, August and September to prevent their becoming offensive to the neighborhood. The waste water and wash water must be subjected to purification before being disposed of.

It shall be the duty of the Health Officer to make a detailed report to the Commissioner of Health, covering any violation of the above rules and regulations.

Piggeries or Piggens shall not be so constructed or maintained as to permit of the discharge, or drainage of any excrementitious material into a stream or other source of water supply.

Camps, Picnic Grounds, Etc. When inspecting lumber, construction, gypsy or other camps, picnic grounds, etc., particularly those located near streams or other sources of water supply, the Health Officer shall note the location and condition of privy vaults, and method used for the disposal of waste. Privies on such premises should be of sufficient number for the accomodation of temporary tenants and visitors, and must be located at least one hundred (100) feet from any stream or other source of water supply unless such supply be from an artesian well, and their vaults must be so constructed that surface drainage into or from the vault is impossible. On premises where the provisions for the reception of excrementitious discharge, are obviously insufficient, search should be made for evidence of the commission of petty nuisances. Should such evidence be found, warning signs should be placed where required, and the

property owner notified of his responsibility for the acts of his tenants. The property owner should be required to post signs directing visitors to buildings provided for toilet purposes and to place water tight garbage receptacles for the reception of refuse discarded by temporary tenants or visitors. Such refuse and garbage should be removed and destroyed either by burning or by other approved methods of garbage disposal.

The source of water supply on such premises should be investigated particularly as regards the danger of pollution from nuisances.

Creameries. When ordered to inspect Creameries the Health Officer shall observe the location regarding streams or any source of water supply, the drainage and construction of the plant and surrounding buildings. If a piggery is connected with the plant its location and condition should be especially noted.

The source of the water supply, particularly that used in the washing of the butter and of milk utensils, should be carefully noted, as well as the provisions for the rinsing, cleansing and steaming of the milk cans and other utensils.

He shall carefully observe the means of disposal of the waste matter, noting the name of any stream into which or into any tributary of which, this effluent is discharged or allowed to flow. The condition of the swill tank should be scrutinized, particularly as to its construction and repair. Search should be made for the existence of overflow pipes leading toward or discharging waste matter into streams or other sources of water supply. Note should be made not only of the general cleanliness of the plant but also of that of the employees.

The inspection should be made during the period in which milk is being received (usually during the early morning hours) that the gross appearance of the milk delivered to the plant may be observed.

Dairies. When ordered to inspect dairies, the Health Officer should note carefully the condition of the stable in which the cows are confined, paying especial attention

to the provisions for ventilation and light, the general repair and cleanliness of the walls, floors and mangers. He should note the condition and care of the cows with regard to grooming, watering and feeding. He should note the cleanliness of the attendants; the condition and care of the milk at the time of milking and straining, the method of cooling, and the storage and distribution of the milk. Note should be made of the source and condition of the water used for drinking, cleansing of utensils, and in the cooling tanks. The report should mention any disease in man or beast existing on or about the premises.

When it becomes known to the Health Officer that milk or its products are being marketed from premises upon which cases of Diphtheria, Scarlet fever, Smallpox, Typhoid fever and Epidemic Cerebrospinal Meningitis (Spotted-fever) exist, it shall be his duty to report the same to the County Medical Inspector.

Dumping Grounds. Public dumps shall not be located or maintained in or near closely inhabited neighborhoods and decomposing animal or vegetable matter shall not be left exposed on such premises. Such matter must be destroyed either by burning or by other approved methods of garbage disposal. The owner of the property will be held responsible for the sanitary condition of premises used as a dumping ground.

Factories, Mills, Etc. Since the enforcement of the law relative to the heating, lighting and the general provisions for the comfort of the employes in such establishments is delegated to the Department of Factory Inspection, the Health Officer will confine his investigation to the following details: Nuisances on the premises; the character, source and possibility of pollution to the water supply used for drinking purposes; and the method of sewage disposal, noting especially the possibility of polluting nearby streams, or other sources of water supply.

Upon the completion of such an investigation he should make a report to the Department giving the date of the

investigation, the name and Post Office address of the owner the location of the factory, the nature of the articles manufactured and the number of people employed, with a general report of the findings along the lines detailed above.

Fertilizer Works and Glue Factories. Fertilizer works and glue factories shall not be erected or maintained in or near a closely inhabited neighborhood excepting at the owner's risk of their being condemned as a public nuisance. In inspecting such plants the Health Officer shall especially note the provision for the disposal of waste products, and the existence of pollution by drainage into adjacent streams, and of offensive odors.

Manure and Night Soil—Disposal of. Manure or night soil shall not be deposited in close proximity to streams or other sources of water supply or in a location permitting of drainage into such bodies of water. Manure shall not be allowed to collect in such quantities or in such condition as to create a nuisance offensive to the smell. When night soil is used as a fertilizer, it shall be composted or immediately ploughed under

Pools of Stagnant Water, Abandoned Canals, Etc , from which foul odors arise and those which afford breeding places for mosquitoes, especially when situated near closely inhabited or built up municipalities should be reported to the Department, making mention of the name and Post Office address of the owner of the property. In case drainage is not feasible, the property owners or householders in that vicinity should be informed that mosquitoes may be temporarily destroyed by covering the surface of such stagnant pool or ponds with a thin film of mineral oil. Under ordinary conditions one ounce of the oil is sufficient to properly cover fifteen square feet of water. Permanent relief is best accomplished by filling in, draining or stocking with sunfish.

Slaughter Houses. In inspecting slaughter houses note ~~should be made of the location, construction and general repair of the buildings, means of disposal of offal and general~~

cleanliness of the premises. With regard to location, careful investigation as to the possibility of pollution of adjacent streams or other sources of water supply should be made. The floor of a slaughter house should be constructed of an impermeable material with adequate provision for its thorough cleansing. The washings and drainage from the floor should under no circumstances be discharged or allowed to flow into any stream, or other source of water supply without purification. The walls of the slaughter house proper should be painted; preferably with a waterproof paint if not built of waterproof material. They should be cleansed and disinfected after each slaughtering.

Animals should never be stabled in buildings where slaughtering is conducted. Adequate provision should be made for the sanitary disposal of offal and for the storing of hides and bones in such a way as not to create a nuisance.

Hides and bones should be removed from the premises at least weekly during winter months and twice each week during June, July, August and September.

A piggery should not be located within one hundred (100) feet of any stream or other source of water supply or in a position where drainage from it will find its way into a source of water supply.

If a piggery exists on the premises note its location, construction and general cleanliness. The floors should be constructed of an impermeable material. It should be so drained that there is little or no foul odor, but such drainage should under no circumstances be discharged or allowed to flow into any stream, or other source of water supply without purification.

When lard or tallow rendering is done in connection with a slaughter house, the process shall be carried on in a separate room, and in such a manner, as not to create a nuisance. It is to be understood that such business is carried on at the owner's risk of having it condemned as a public nuisance provided adequate precautions to prevent its being objectionable are not observed.

Sewers. In the inspection of sewers the following points should be noted:

Is the sewer public or private? Does it take storm water only, or storm water and sewage, or sewage only? Where does it discharge? Is any nuisance or menace to health caused by said discharge? Is the stream into which the sewage goes used as a source of drinking water for man or beast, either in the vicinity, or at a remote distance? Are the buildings connected with the sewer dwellings only, or dwellings and manufactories? If manufactories, of what nature are they? Submit a sketch of the sewer and describe its use, and the extent of its use. Ascertain the conditions of the sewer, whether it is well ventilated and properly flushed and adequate for the purpose for which it was built, and state the size and construction. Give the name of the owner or owners if it is a private sewer.

Report immediately all sewers being built or extensions of existing systems. Ascertain how sewage and slop water are disposed of by every property in your district, and report to the Department of Health.

Water Works. It is provided by law that no public or private corporation or municipality supplying water to the public, shall extend its water works or introduce new sources of supply, or build dams, reservoirs, etc., without receiving the approval of the Commissioner of Health. Report immediately all extensions and improvements of such systems in the district. Describe each system of water works, report the source of supply, and whether the water is furnished to the public filtered or unfiltered.

Unburied Dead Animals—Disposal of. Owners of dead animals left unburied, thereby creating nuisances, and those left in streams or in locations permitting of drainage into any stream or other source of water supply, shall be notified to remove such animals to a distance of over one hundred feet from such stream or other source of water

NOTE.—It is illegal for any sewer to be laid, or any extension of existing sewers to be built without approval by the Commissioner of Health.

supply and bury the same with every part at least eighteen (18) inches beneath the surface of the ground, which should be so protected that the carcass will not be dug out, or exposed by dogs or other animals. Upon the failure of the owner of such an animal to comply with said order within forty-eight (48) hours, the Health Officer shall, with the approval of the Commissioner of Health, cause the arrest of the owner of such unburied animal. When any domestic animal dies or is killed while affected with an infectious, contagious, or parasitic disease adjudged by the State Live Stock Sanitary Board to be of a dangerous or virulent character, particularly such diseases as Anthrax, Blackquarter, Hog Cholera, Swine Plague, Rabies or Glanders, the owner of such animal is required by law to destroy or dispose of the carcass and its parts in a sanitary manner within twenty-four (24) hours after notification of its presence. Neglect on the part of the owner to properly dispose of such unburied animals should be reported to the State Live Stock Sanitary Board at once.

Water Pollution. In the examination of the waters of the State for sources of contamination, the Health Officer should note their location relative to the possibility of pollution by drainage from barn and chicken yards, creameries, dead animals, overflowing or overhanging privies, piggeries and pigpens, accumulation of decayed animal or vegetable matter, sewers, either municipal or private, and by industrial waste injurious to the health of man.

Where evidence of pollution from any source whatsoever, is discovered, he shall render a detailed report of the same to the Department. The report shall include the full name and Post Office address of the agent, owner or occupier, the location of the premises and the name of the stream or of the stream of which any polluted brook, rivulet or spring may be a tributary, together with any other incidental information brought to his notice.

Disinfection of Wells, Springs, Cisterns, Etc. The water of any suspicious supply should be ordered to be boiled be-

fore using and the conditions reported to the Department of Health. If any source of pollution is discovered by the Health Officer the use of the water should be discontinued until the source of pollution is removed and the supply disinfected.

The cheapest and perhaps the best disinfectant for the purpose is freshly burned, unslaked lime. For the ordinary well one-half barrel of lime should be emptied into the same and the walls above the water level thoroughly scrubbed with the resulting milk of lime by means of a stiff brush. The well should then be pumped dry, allowed to refill and a like amount of lime added. It should then be permitted to stand for twenty-four hours and then successively exhausted and allowed to refill until the lime can be no longer detected in the water. The water is thus purified and should be drawn through the pipes and fixtures until they are thoroughly washed out. In the case of springs or cisterns an adequate amount of lime should be used, and their sides and bottoms should be thoroughly cleaned.

Disinfection of Privies, Privy Vaults and Urinals. Privy vaults could be disinfected by the use of freshly burned, unslaked lime. The lime should be added and the vault contents thoroughly stirred until the entire mixture is of alkaline reaction as shown by turning red litmus paper blue. Box vaults or earth closets may be kept dry and free from odor by the frequent use of lime and ashes.

Urinals. When necessary, urinals may be disinfected by flushing with a solution made in the proportion of six (6) ounces of a saturated solution of formaldehyde to the gallon of hot water.

Room Disinfection. Before raising quarantine, the patient and nurse should each be given an antiseptic bath, under the instructions of the attending physician. A mixture made in the proportion of two (2) Bichloride of Mercury tablets to the gallon of hot water (about 1-4000) makes a desirable solution for this purpose. This should be followed by a plain soap and water bath.

The Health Officer or person having charge of the disin-

fection of a room or rooms, should wear a washable gown, entirely covering the clothing and reaching to a point well below the shoe tops. He should also wear a hood or protective covering for the hair and a pair of high, well fitting rubbers. These may be removed and left in the last room to be disinfected just prior to its closure, or they should be sprinkled with at least two ounces of the officinal solution of formaldehyde, (U. S. P.) rolled in a compact bundle and placed within a convenient canvas or leather bag which should be used for this purpose only.

When a room that has been occupied by the patient is vacated it should be hermetically sealed with strips of gummed paper, strips of paper smeared with flour paste, or adhesive plaster, closing flues, chimney places and all visible cracks and crevices about walls and windows. Open up beds, stand mattresses on end, open closets, bureau drawers, trunks, etc., and spread their contents about the room. Fabrics, especially carpets, bed and body clothing fully unfolded, should be suspended upon chairs, clothes-lines, bedsteads, etc., thereby exposing them to the fumes of formaldehyde gas. In using formaldehyde gas for disinfection, the air of the room should be both warm and moist. The latter may be accomplished by sprinkling the floor or by suspending wet sheets about the room.

A safe and simple method of generating this gas is by the addition of a solution of formaldehyde to Potassium Permanganate. Six and one-half ounces, by weight, of Commercial Potassium Permanganate crystals is required for each pint of the formaldehyde solution, in disinfecting every 1000 cubic feet of air space. Briefly, this method may be described as follows: First place the Potassium Permanganate crystals in a tin, agate or iron pail, the capacity of which is over eight times the quantity of disinfectant to be used. This is necessary to prevent overflow of the solution due to effervescence. Place the pail containing the crystals at the centre of the room in a dish pan with a non-conductor, such as a stove lid or bricks under the pail, as considerable heat is given off upon mixing the chemicals.

Having made sure that the room is properly sealed, pour the Formaldehyde solution upon the crystals from a wide-mouthed vessel that it may be done quickly, and immediately leave the room, sealing any openings in and around the door of exit and keep it closed for at least six hours.

Until Health Officers are thoroughly familiar with this method of disinfection, particularly as to the amount of effervescence, it would be well to place strips of old carpet or blankets under and about the containers to prevent injury to the floors or furniture from any overflow of the solution.

Rooms containing not over 500 cu. ft., hallways, etc., may be sprayed with the solution of formaldehyde, one pint to each thousand (1000) cubic feet of air space. Where an entire house is to be disinfected the rooms not occupied by the patient and nurse should be disinfected first. The clothing to be worn immediately after disinfection should be placed in these rooms. After the patient, nurse and other occupants of the house have been disinfected they should go to the disinfected rooms, first being wrapped in sheets that have been wrung out of the bichloride solution above, and dress in the disinfected clothing and then the remainder of the house should be disinfected.

After disinfection the householder should be instructed to soak bedding and body clothing, etc., in a solution made in the proportion of four (4) ounces of Chlorinated Lime (chloride of lime or bleaching powder) to eight gallons of water. After remaining in this solution for three hours they should be removed and boiled at least one hour. The exposed surfaces of mattresses should be sprinkled with one-half pint of the solution of formaldehyde which after being mixed with a like volume of hot water may be sprinkled upon the mattress by means of a broom or wisp. After disinfection, the exposed surfaces should be moistened with a cloth or sponge wrung out of a solution made in the proportion of eight (8) Bichloride of Mercury tablets to the gallon of hot water. Mattresses, especially

those soiled by discharges, should be burned. Except in cases of smallpox, the removal and destruction of mattresses or bedding shall be at the owner's option and expense.

The householder should be instructed with regard to the cleansing of the infected room when opened after disinfection. The wall paper should be scraped off, and the walls, floors, ceilings, woodwork, windows and furniture (except metal fixtures) washed with a solution made in the proportion of eight (8) Bichloride of Mercury tablets to the gallon of hot water (about 1-1000). Metal furniture and fixtures should be washed with a solution of carbolic acid made in the proportion of six (6) ounces of pure carbolic acid to the gallon of hot water. After standing for one day all these surfaces should be scrubbed with soap and water and the room freely ventilated for three days before it is again occupied.

Sulphur Disinfection to be used after all cases of smallpox in conjunction with Formaldehyde. For this form of disinfection five pounds of flowers of sulphur should be used for every 1000 cubic feet of air space.

Place the sulphur in an iron kettle or pan resting upon bricks with a tub containing sufficient water to exclude the possibility of igniting objects nearby. The sulphur may be ignited by hot coals or by lighting a small quantity of alcohol which is placed in the centre of the sulphur. A hasty exit should be made by the disinfector. The room should be closed at least twenty-four (24) hours. It should be remembered that sulphur will tarnish metals and is injurious to the coloring matter and tensile strength of fabrics.

After smallpox cases, mattresses as well as any books used by such patients must be burned, after being disinfected in the room where they were used.

Upon opening such a room the wall paper should be scraped off, and the floors, walls, ceilings, wood work, windows and furniture (except metal) should be washed with a solution made in the proportion of eight (8) Bichloride of

Mercury tablets to the gallon of hot water (about 1-1000). Metal furniture and fixtures may be washed with a solution of carbolic acid made in the proportion of six (6) ounces of pure carbolic acid to the gallon of hot water. After standing for one day all these surfaces must be scrubbed with soap and water and the room freely ventilated for three days before it is again occupied.

Every part of a house frequented by a smallpox patient at any time of his illness, should be treated as above. Special attention should be paid to hand railings, door knobs, etc.

If the patient used an outside privy prior to the establishment of quarantine, its wood work should be thoroughly scrubbed with a solution of Mercury (1-1000). Loose scraps of paper should be burned and the vault contents covered with at least two inches of freshly burned unslaked lime, after which an equal amount of fresh soil or ashes should be added. Whenever a privy vault receives the discharges from a smallpox patient, even though disinfected, the vault should be treated as above after the recovery of the case or cases.

All domestic animals that have been under quarantine should be disinfected as thoroughly as the occupants of the house.

Poisonous drugs and solutions such as Bichloride of Mercury, Carbolic Acid, etc., should be plainly labelled and kept beyond the reach of children.

Removal of Placards.

Upon the completion of the disinfection of persons and premises as required for the various communicable diseases, the placard or placards on the premises should be removed by the Health Officer.

APPENDIX.

CIRCULARS AND FORMS.

The Department will mail upon request any or all of the following circulars:

No. 1.—Rules and Regulations Governing the Report of Communicable Diseases.

No. 2.—Typhoid Fever—Rules to be Observed by Nurses and Attendants.

No. 3.—Diphtheria—Rules to be Observed by Nurses and Attendants.

No. 4.—Scarlet Fever—Rules to be Observed by Nurses and Attendants.

No. 5.—Epidemic Cerebrospinal Meningitis (Spotted Fever). Rules to be Observed by Nurses and Attendants.

No. 6.—Directions for Room Disinfection.

No. 8.—Quarantine, Isolation and Disinfection.

No. 9.—Smallpox—Precautions to be Observed by Physicians, Health Officers, Etc.

No. 10.—Instructions for Disinfection of Schools.

No. 11.—Pulmonary Tuberculosis (Consumption)—Rules to be Observed by Patients, Nurses and Attendants.

No. 13.—Smallpox—Rules to be Observed in the Care and Management.

No. 14.—Vaccination—Statistics and Instructions for Operation.

No. 15.—To all School Directors, Principals and Teachers in Pennsylvania.

No. 17.—Measels and German Measels—Rules to be Observed by Nurses and Attendants.

No. 18.—Whoopingcough—Rules to be Observed by Nurses and Attendants.

No. 19.—Mumps—Rules to be Observed by Nurses and Attendants.

No. 20.—Chickenpox—Rules to be Observed by Nurses and Attendants.

Vaccination Blank Form No. 10.—Certifying to New Successful Vaccination.

Vaccination Blank Form No. 11.—Certifying to Former Successful vaccination.

Vaccination Blank Form No. 12.—Certifying to previous Case of Smallpox.

CIRCULAR NO. 1.

Rules and Regulations Governing the Report of Communicable Diseases.

Under the provisions of the Act of Assembly of the twenty-seventh day of April, A. D. one thousand nine hundred and five, to protect the life and the health of the people of the State of Pennsylvania.

Section 1. All physicians practicing within the limits of the State shall make an immediate report of every case occurring in their practice of the diseases hereinafter specified, if occurring in a city or borough, to the Secretary of the Board of Health of such city or borough, and if occurring within the limits of a township, to the Health Officer in charge of the township in which said patient may be located.

Section 2. The report of each and every case of any of the diseases hereinafter enumerated shall be upon a standard form and shall contain the following information: Date of report, full name of patient, occupation (if any), nativity, age, sex, color and address of patient, including, if in a city

or borough, the name of the street and house number, the name of the city or borough and county, and if in a township the post office address of the patient, name of township and county, the name of the disease, date of onset of the disease, name and occupation of the householder in whose family the disease may have occurred, number of children in said household attending school, name of school or schools and name and address of the physician making the report. In the case of townships the above required reports shall be made upon a standard duplicate postal card, furnished by the Department of Health.

Section 3.—Each and every case of smallpox occurring in the practice of any physician, which may be located in a township outside of a city or borough, shall be reported immediately by telephone or telegraph, by the physician in attendance, to the County Medical Inspector of the county in which the disease may be located, giving the name and address in full of each patient; this notification to be followed by a report in writing upon the regular postal card blanks provided for this purpose.

Section 4. It shall be the duty of each and every Board of Health of any city or borough within the State, through its Secretary, Health Officer or other duly authorized official, to make a report in writing at the end of each week to the Department of Health upon the forms prepared and supplied by said Department of all cases of the following named diseases, occurring within the limits of said city or borough during said week. A report shall also be made for any fraction of a week occurring at the end of a month, so that the first weekly report in any month shall begin with the first day of the month.

Section 5. The diseases referred to in preceding sections of this circular, and of which report is required to be made by physicians and health authorities are as follows: Actinomyces, Anthrax, Bubonic Plague, Cerebrospinal Meningitis, Chickenpox, Cholera, Diphtheria (so-called membranous croup, diphtheritic croup, putrid sore throat,

should be reported as diphtheria), Epidemic Dysentery. Erysipelas, German Measels, Glanders, Hydrophobia, Leprosy, Malarial Fever, Measels, Mumps, Pneumonia (true), Puerperal Fever, Relapsing Fever, Smallpox, Scarlet Fever, (so-called scarlatina and scarlet rash should be reported as scarlet fever), Tetanus, Trachoma, Trichiniasis, Tuberculosis (specify what form), Typhoid Fever, Typhus Fever, Whoopingcough and Yellow Fever.

CIRCULAR NO. 2.

Wipe out Typhoid by Killing the Germs in the Bed-Pan.

RULES TO BE OBSERVED BY NURSES AND ATTENDANTS IN CHARGE OF PERSONS SUFFERING FROM TYPHOID FEVER.

Place the patient, if possible, in a well lighted and well-ventilated room.

Remove from the room all superfluous articles of furniture and draperies.

Kill the typhoid germs contained in the discharges of the patient before they leave the sick room to lay other fellow beings low with the disease.

Secure any of the following disinfectants: Kreolin, Lysol, Tri-Kresol, Chlorinated Lime (chloride of lime or bleaching powder), or an officinal (U. S. P.) solution of Formaldehyde which is preferred.

Make up disinfectant solutions from the above by adding three teaspoonfuls of Kreolin, Lysol or Tri-Kresol or eight teaspoonfuls of the officinal (U. S. P.) solution of Formaldehyde to a pint of water, or one-half pound of Chlorinated Lime to one gallon of water.

Keep constantly in the bed-pan, urinal, chamber, commode or other vessel intended to receive the discharges from the bowels or bladder, a moderate quantity of the disinfectant solution selected, and after receiving the discharges add a quantity sufficient to equal the amount of the discharges.

Cover and remove the vessel and allow the contents to stand for one hour before emptying the same.

Never empty the discharges upon the surface of the ground, or into a stream, even though disinfected.

If the discharges are emptied into a water closet or privy they must be thoroughly disinfected first. They must never be buried until after being thoroughly disinfected and then never less than one foot below the surface of the ground nor within one hundred feet of a well or water course.

If a privy well is used, empty three gallons of any of the disinfectant solutions into it daily.

Keep constantly on hand a basin or other vessel containing one of the solutions mentioned for the purpose of washing your hands.

Wash your hands in the solution immediately after handling the patient, the discharges, or any of the body clothing.

Keep constantly in a convenient place a tub or other proper vessel containing a sufficient quantity of one of the disinfectant solutions in which to soak all of the patient's bed and body clothing.

(If Chlorinated Lime is used for this purpose, one-quarter of a pound should be dissolved in eight gallons of water).

Place all such clothing in this vessel immediately upon its removal from the bed or the body of the patient, leaving it in the disinfectant solution for at least three hours, after which it should be boiled thoroughly for at least one hour.

Do not permit the use by others of drinking vessels or eating utensils used by the patient until they have been boiled for at least one hour.

Do not eat or permit others to eat scraps or remnants of food left by the patient.

Burn all such material at once.

Add a disinfectant solution to all water that has been used for bathing the patient, and dispose of it in the same manner as the body discharges.

Do not throw this water on the surface of the ground.

Thoroughly disinfect all discharges from the mouth and nose.

If received in vessels treat these as all other discharges.

If received in handkerchiefs treat as bed clothing, or if received in old linen burn the same at once.

Thoroughly screen the room to exclude all flies and mosquitoes.

Destroy all insects in the room.

Exclude domestic animals.

Do not kiss the patient.

Do not encourage visitors to the sick room.

Aside from their disturbing influence on the patient they may through carelessness contract the disease.

Boil all water used for domestic purposes.

Individual milk bottles should not be taken into the premises.

The householder should set a vessel out to receive the milk and the person delivering the milk should pour it into such vessel without touching it with his hand or with the vessel from which the milk is delivered.

Follow these rules during the entire illness, do not relax them during convalescence, but continue until entire recovery, as the specific germ of typhoid may exist in the stools or urine of typhoid patients for at least four weeks after the disappearance of the fever.

Upon the termination of the case sprinkle all carpets, rugs or washable bedding freely with the officinal (U. S. P.) solution of Formaldehyde. Roll up and allow to remain for twenty-four hours then expose to fresh air and sunlight for twenty-four hours.

The room should be thoroughly disinfected after the recovery of the patient.

The following out of these instructions will save other lives and prevent much suffering and expense.

CIRCULAR NO. 3.

RULES TO BE OBSERVED BY NURSES AND ATTENDANTS IN CHARGE OF PERSONS SUFFERING FROM DIPHTHERIA.

The patient should be confined to one room, with windows screened, which room should be well lighted and ventilated, preferably with Southern exposure and as remote as possible from other occupied rooms in the house.

Failure to observe this personal isolation will result in an absolute quarantine over the entire household.

This room should be stripped of curtains, carpets and upholstery and all other furniture not necessary for the comfort of the occupants. A sheet should be hung over the doorway, from top to bottom, and kept moist with a poisonous solution, one part of Bichloride of Mercury to a thousand of water. To prepare this solution dissolve eight (8) Bichloride of Mercury tablets in one (1) gallon of hot water.

Secure any of the following disinfectants: An officinal (U. S. P.) solution of Formaldehyde, Kreolin, Lysol, Tri-Kresol or Chlorinated Lime (Chloride of Lime or Bleaching Powder).

Make up disinfectant solution from the above by adding three teaspoonfuls of Kreolin, Lysol or Tri-Kresol or eight teaspoonfuls of an officinal (U. S. P.) solution of Formaldehyde to a pint of water, or one-half pound of Chlorinated Lime to one gallon of water. The officinal (U. S. P.) solution of Formaldehyde is preferred.

Outside of the sick room door large receptacles containing one of the above mentioned solutions except that made of Chlorinated Lime should be kept standing for the reception of plates and eating utensils of all kinds.

Do not use drinking vessels or eating utensils from the sick room. Do not permit others to do so until they have been boiled for at least one hour.

Remnants of food left by the patient should be burned.

Keep constantly on hand a basin or other vessel containing one of the solutions mentioned, in which the hands should be washed immediately after handling any secretions or clothing from the patient.

Keep constantly in a convenient place a tub or other vessel containing a sufficient quantity of one of the disinfectant solutions, in which to soak all bed and body clothing.

(If Chlorinated Lime is used for this purpose, one-quarter pound should be mixed with eight gallons of water.)

Place all such clothing in this vessel immediately upon removal from the bed or from the body of the patient, and allow to soak for at least three hours after which they should be boiled for at least one hour.

Do not carry such clothing through the house, or store it with other soiled material.

Rags used for the collection of the discharges from the nose and throat should be burned.

The discharges from the bowels, or any vomited matter should be disinfected by the addition of a quantity of the standard solution of Chlorinated Lime (Chloride of Lime or Bleaching Powder) sufficient to more than cover the discharge, or if the discharges are liquid add a quantity equal in bulk. The mass should be stirred up and the vessel and contents should be allowed to stand at least one-half hour before emptying.

Never empty the discharges upon the surface of the ground or into a stream.

If a sewerage system exists, use it, but only after a thorough disinfection of the discharges.

If a privy well exists, use that, or bury the material one foot below the surface of the ground and not less than one hundred feet from a well or water course. It must be out of the reach of dogs.

Add a disinfectant solution to all water that has been used for bathing the patient, and dispose of it in the same manner as the body discharges.

If a privy well is used, empty three gallons of any of the disinfectant solutions into it daily.

The nurse or attendant should wear only washable clothing, with a protective covering for the hair. When released from the sick room she should take a disinfecting bath of Bichloride of Mercury 1 to 4,000, made by dissolving two Bichloride of Mercury tablets to the gallon of hot water, paying special attention to the disinfection of the hair and scalp.

The air of the sick room cannot be disinfected during occupancy by the patient.

The practice of hanging up cloths saturated with carbolic acid or of placing saucers of Chlorinated Lime or proprietary disinfectants in the sick room is not only annoying to the patient, but utterly useless, if not injurious.

An abundance of fresh air should be admitted to the room, but the patient should be protected from direct draughts.

When in the opinion of the attending physician the patient has recovered, and with the expiration of the period of quarantine, the patient should be given an antiseptic bath under the direction of the physician, especial attention being paid to the disinfection of the hair and scalp.

The antiseptic bath may be prepared by dissolving two Bichloride of Mercury tablets in every gallon of hot water used. This should be followed by a plain soap and water bath.

After bathing, the patient should be wrapped in a clean sheet handed from without, step into a disinfected room, and dress in clothing that has been disinfected.

As disinfectant agents are poisonous when taken internally, such drugs and solutions should always be plainly labelled and kept out of the reach of children.

Flies must be carefully excluded from the room and any that find entrance should be killed.

Dogs, cats and other household pets should be quarantined and disinfected, and any found running loose should be killed.

After the removal of the patient, the sick room and everything it contains must be disinfected by Formaldehyde gas. Such articles as are not of great value should be burned; for instance, books and playthings.

The period of quarantine in cases of diphtheria shall be twenty-one (21) days from the date of onset or fourteen (14) days in cases where two negative bacteriological reports are obtained from cultures taken from the diseased area on successive days.

In the event of death from diphtheria, the funeral shall be strictly private and burial made within thirty-six (36) hours unless permission extending this time be granted by the health authorities.

The law forbids children or other persons living in a house in which diphtheria exists from attending school not only during the existence of the disease, but for thirty days after disinfection of the premises.

The use of the word school wherever it occurs in the regulations of the Department shall mean public, private, parochial, Sunday or other school.

The Department of Health has established depots for the free distribution of antitoxin to the poor at convenient points in every county, where it may be obtained on application by any registered physician. The nurse or attendant should consult the physician in charge about the use of the antitoxin to prevent their contracting the disease.

CIRCULAR NO. 4.

RULES TO BE OBSERVED BY NURSES AND ATTENDANTS IN CHARGE OF PERSONS SUFFERING FROM SCARLET FEVER.

The patient should be confined to one room, which should be well lighted and ventilated, with windows screened,

preferably with Southern exposure and as remote as possible from other occupied rooms in the house.

Failure to observe this personal isolation will result in an absolute quarantine over the entire household.

This room should be stripped of curtains, carpets and upholstery and all other furniture not necessary for the comfort of the occupants. A sheet should be hung over the doorway, kept moist with a poisonous solution, one part Bichloride of Mercury to a thousand of water.

To prepare this solution dissolve eight (8) Bichloride of Mercury tablets in one gallon of hot water.

Secure any of the following disinfectants: An officinal (U. S. P.) solution of Formaldehyde, Kreolin, Lysol, Tri-Kresol, or Chlorinated Lime (Chloride of Lime or Bleaching Powder).

Make up disinfectant solutions from the above by adding three teaspoonfuls of Kreolin, Lysol or Tri-Kresol or eight teaspoonfuls of an officinal (U. S. P.) solution of Formaldehyde to a pint of water, or one-half pound of Chlorinated Lime to one gallon of water.

Outside of the door large receptacles containing one of the above mentioned solutions, except that made of Chlorinated Lime, should be kept standing for the reception of plates and eating utensils of all kinds.

Do not use drinking vessels or eating utensils from the sick room. Do not permit others to do so until they have been boiled for at least one hour.

Remnants of food left by the patient should be burned.

Keep constantly on hand a basin or other vessel containing one of the solutions mentioned above, in which the hands should be washed immediately after handling any secretions or clothing from the patient.

Keep constantly in a convenient place a tub or other proper vessel containing a sufficient quantity of one of the disinfectant solutions, in which to soak all bed and body clothing.

(If Chlorinated Lime is used for this purpose one-quarter pound should be mixed with eight gallons of water.)

Place all such clothing in this vessel immediately upon its removal from the bed or body of the patient and allow it to soak for at least three hours after which it should be boiled for at least one hour.

Do not carry such clothing through the house, or store it with other soiled material.

Rags used for the collection of the discharges from the nose and throat should be burned.

The discharges from the bowels, or any vomited matter should be disinfected by the addition of a quantity of the standard solution of Chlorinated Lime (Chloride of Lime or Bleaching Powder) sufficient to more than cover the discharge, or if the discharges are liquid add a quantity equal in bulk. The mass should be stirred up and the vessel and contents should be allowed to stand at least one-half hour before emptying.

Never empty the discharges upon the surface of the ground or into a stream.

If a sewerage system exists, use that or bury the material one foot below the surface of the ground and not less than one hundred feet from a well or water course. It must be out of the reach of dogs.

Add a disinfectant solution to all water that has been used for bathing the patient, and dispose of it in the same manner as the body discharges.

If a privy well is used, empty three gallons of any of the disinfectant solutions into it daily.

The nurse or attendant should wear only washable clothing with a protective covering for the hair. When released from the sick room, she should take a disinfectant bath of Bichloride or Mercury 1 to 4,000, made by dissolving two Bichloride of Mercury tablets to the gallon of hot water, paying especial attention to the disinfection of the hair and scalp.

The air of the sick room cannot be disinfected during its occupancy by the patient.

The practice of hanging up cloths saturated with carbolic acid or of placing saucers of Chlorinated Lime or proprietary disinfectants in the sick room is not only annoying to the patient, but utterly useless if not injurious.

An abundance of fresh air should be admitted to the room, but the patient should be protected from direct draughts.

When in the opinion of the attending physician the patient has recovered, and with the expiration of the period of quarantine the patient should be given an antiseptic bath under the direction of the physician, especial attention being paid to the disinfection of the hair and scalp.

The antiseptic bath may be prepared by dissolving two Bichloride of Mercury tablets in every gallon of hot water used. This should be followed by a plain soap and water bath.

After bathing, the patient should be wrapped in a clean sheet handed from without, and step into a disinfected room, and dress in clothing which has been disinfected.

As disinfectant agents are poisonous when taken internally, such drugs and solutions should always be plainly labeled and kept out of the reach of children.

Flies must be carefully excluded from the room and any that find entrance should be killed.

Dogs, cats and other household pets should be quarantined and disinfected and any found running loose should be killed.

After the removal of the patient, the sick room and everything it contains must be disinfected by Formaldehyde gas. Such articles as are not of great value should be burned; for instance books and playthings. The minimum period of modified or absolute quarantine shall be thirty days from the date of onset of the disease, but no case shall under any circumstances be released until the phy-

sician has certified in writing that desquamation has entirely and absolutely ceased.

In the event of death from Scarlet fever, the funeral shall be strictly private and burial shall be made within thirty-six (36) hours, unless permission extending this time be granted by the health authorities.

The law forbids children or other persons living in a house in which scarlet fever exists from attending school, not only during the existence of the disease, but for thirty (30) days after disinfection of the premises.

The use of the word school wherever it occurs in the regulations of the Department shall mean public, private, parochial, Sunday or other school.

CIRCULAR NO. 5.

RULES TO BE OBSERVED BY NURSES AND ATTENDANTS IN CHARGE OF PERSONS SUFFERING FROM EPIDEMIC CEREBROSPINAL MENINGITIS (SPOTTED FEVER).

The patient should be confined to one room, with windows screened, well lighted and ventilated, and preferably with southern exposure, but always as remote as possible from other occupied rooms in the house. Failure to observe this personal isolation, will result in an absolute quarantine over the entire household.

The room should be stripped of curtains, carpets and upholstery, and all other furniture not necessary to the comfort of the occupants. A sheet should be hung across the doorway, and kept moist with a solution, one part of Bichloride of Mercury to a thousand of water.

Secure any of the following disinfectants: an officinal (U. S. P.) solution of Formaldehyde, Kreolin, Lysol, Tri-Kresol or Chlorinated Lime (Chloride of Lime or Bleaching Pow-

der), Bichloride of Mercury (Corrosive Sublimate), or Carbolic Acid.

Make up disinfectant solutions from the above by adding three teaspoonfuls of Kreolin, Lysol or Tri-Kresol or eight teaspoonfuls of an officinal (U. S. P.) solution of Formaldehyde to a pint of water, or one-half pound of Chlorinated Lime to one gallon of water. The solution of Formaldehyde is preferred.

For making Corrosive Sublimate solution (1-1000) dissolve eight (8) Bichloride of Mercury tablets in one gallon of hot water.

This solution is highly poisonous, and is injurious to plumbing and should be kept in earthen, glass or wooden vessels out of the reach of children.

In making up solutions of carbolic acid, dissolve six ounces of pure carbolic acid in one gallon of hot water.

The nurse should wear a protective gown and hood, removing the same and carefully disinfecting exposed surfaces upon leaving the sick room.

The sputum (spit) should be carefully collected in a spit cup and disinfected by the use of an officinal (U. S. P.) solution of Formaldehyde or the solution of Chlorinated Lime prepared as described above. Rags used in the collection of discharges from the nose and mouth should be promptly disinfected or burned.

Outside of the door, large receptacles containing one of the above mentioned solutions, except that made of Chlorinated Lime, should be kept standing for the reception of plates and eating utensils of all kinds, after which they should be scalded. All remnants of food should be burned.

Keep constantly on hand a basin or other vessel containing one of the solutions mentioned, in which the hands should be washed immediately after handling any secretions or clothing from the patient.

Keep constantly in a convenient place a tub or other proper vessel containing a sufficient quantity of one of the

disinfectant solutions in which to soak all of the patient's bed or body clothing.

(If Chlorinated Lime is used for this purpose, one-quarter pound should be mixed with eight gallons of water).

Place all such clothing in this vessel immediately upon its removal from the bed or the body of the patient, and allow them to soak for at least three hours, after which they should be boiled for at least one hour.

Do not carry such clothing through the house or store it with other soiled material.

The urine and bowel discharges or any vomited matter should be received in vessels containing an excess of a disinfectant solution, preferably Chlorinated Lime, eight ounces to the gallon of water.

These discharges should be removed, covered and allowed to stand one-half hour before emptying. A sewer may be used for the disposal of discharges if repeatedly flushed after use, or the discharges may be emptied into a privy vault but such material should never be thrown on the surface of the ground.

Add a disinfectant solution to all water that has been used for bathing the patient, and dispose of it in the same after they have become soiled by any discharges.

A broom or dry duster should never be used in such a patient's room on account of the danger of disseminating the disease by dust which should be removed with a damp cloth.

In the daily cleaning of the room, except metal fixtures, use the solution or corrosive sublimate or the solution of carbolic acid, the latter of which may also be used on metals.

The nurse or attendant should carefully disinfect the hands after any attention to the patient and immediately after they have become soiled by any discharges.

The use of a nasal inhaler by the nurse or attendant in the sick room is to be recommended, as is the spraying of

the mouth, nose and throat at frequent intervals with equal parts of water and Liq. Antisepticus, (U. S. P.)

Unnecessary visits to the sick room by members of the family should be discouraged and kissing the patient should be positively forbidden.

When quarantine is to be lifted the occupants of the household should take an antiseptic bath under the direction of the doctor, especial attention being paid to the disinfection of the hair and scalp.

For the antiseptic bath use a solution made in the proportion of two Bichloride of Mercury tablets to the gallon of hot water, to be followed by a plain soap and water bath.

After bathing they should be wrapped in a clean sheet handed from without and step into a room within which their clothing has been recently disinfected, to dress.

In the event of death from epidemic cerebrospinal meningitis, the funeral shall be strictly private and burial made within thirty-six (36) hours unless permission extending this time be granted by the health authorities.

Following the recovery, death or removal of such a case, the room and its contents must be disinfected with Formaldehyde gas.

Such articles as are not of great value should be burned; for instance, books and playthings.

Those suffering from the disease and those exposed to the disease within such a household shall be excluded from school during the illness of the patient and shall be readmitted only upon the certificate of a physician attesting to their recovery and freedom from infection.

The use of the word school wherever it appears in the regulations of the Department shall mean public, private, parochial, Sunday or other school.

CIRCULAR NO. 6.

DIRECTIONS FOR ROOM DISINFECTION.

When quarantine is to be raised, providing the attending physician has been consulted and approves, the patient and nurse should each be given an antiseptic bath, paying particular attention to the disinfection of the hair and scalp.

A mixture made by dissolving two Bichloride of Mercury tablets in every gallon of water makes a desirable solution for the purpose.

They should be wrapped in clean sheets handed them from outside and then step into a non-infected room to dress.

When the sick room is vacated it should be hermetically sealed with strips of gummed paper or adhesive plaster; closing flues, chimney places and all visible cracks and crevices about walls, doors and windows.

Open up beds, stand mattresses on end, open closets, bureau drawers, trunks, etc., and spread their contents about the room.

Fabrics, especially carpets, bed and body clothing fully unfolded, should be suspended upon chairs, clothes-lines, bedsteads, etc., exposing all to the fumes of Formaldehyde gas, which is the most efficient agent for room disinfection in use at the present time.

It is a powerful germ destroyer, yet it causes practically no injury to delicate fabrics or room furnishings.

In using Formaldehyde gas for disinfection, the air of the room should be both warm and moist. The latter may be accomplished by suspending wet sheets about the room.

An effective and economical method of generating this gas is by the addition of an officinal (U. S. P.) solution of Formaldehyde to Potassium Permanganate.

Eight ~~Six and one-half~~ ounces, by weight, of commercial Potassium Permanganate crystals is required for each pint of the Formaldehyde solution in disinfecting every 1,000 cubic feet of room space.

Briefly, this method may be described as follows:

Place the crystals in a tin, agate or iron pail, the capacity of which is over ~~eight~~ ^{ten} times the quantity of disinfectant to be used.

This is necessary to prevent overflow of the solution from effervescence.

Place the pail containing the crystals at the center of the room in a dish pan with a nonconductor, such as a stove lid or bricks placed under the pail, as considerable heat is given off upon mixing the chemicals.

When the room is properly sealed, quickly pour the Formaldehyde solution upon the crystals and make a hasty retreat.

Carefully seal the door of exit, including the keyhole and crevices about the door knob and allow the room to remain closed at least six hours.

To recapitulate:

Always place the Potassium Permanganate crystals in the pail first.

Pour the Formaldehyde solution from a wide-mouthed vessel that it may be done quickly.

Seal the door of exit promptly as over 80 per cent. of the gas is liberated during the first five minutes.

After disinfection soak bed and body clothing, etc., in a solution made by dissolving four (4) ounces of Chlorinated Lime (chloride of lime or bleaching powder) in eight gallons of water.

After remaining in this solution for two hours they should be removed and boiled at least one hour.

After the necessary cleaning the windows should be opened and the room thoroughly aired for two days before it is again occupied.

Poisonous drugs such as corrosive sublimate, carbolic acid, etc., should be plainly labelled and kept beyond the reach of children.

SULPHUR DISINFECTION.

Sulphur is regarded by many authorities as very efficacious in disinfection after cases of smallpox and is used frequently in conjunction with Formaldehyde disinfection after this disease.

Five pounds of flower of sulphur should be used for every 1,000 cubic feet of air space.

Place the sulphur in an iron kettle or pan resting upon bricks within a tub containing sufficient water to exclude the possibility of igniting objects nearby.

The sulphur may be ignited by hot coals or by lighting a small quantity of alcohol which is placed in the center of the sulphur. A hasty exit should be made by the disinfector.

The room should be closed at least twenty-four hours.

It should be remembered that sulphur will tarnish metals and is injurious to the coloring matter and tensile strength of fabrics.

After smallpox cases mattresses used by such patients and books exposed to the infection should be burned after disinfection.

Upon opening such a room the wall paper should be scraped off, and the walls, ceilings and wood work washed with a solution made by dissolving eight Bichloride of Mercury tablets in every gallon of hot water. After standing for one day all these surfaces must be scrubbed with soap and water, after which the room should be freely ventilated for three days before occupancy.

Every part of a household frequented by a smallpox patient at any time of his illness, should be treated as above.

Special attention should be paid to hand railings, door knobs, etc. If such a person has used an outside privy before the establishment of quarantine, the wood work should be thoroughly scrubbed with the corrosive sublimate solution as directed above.

Scraps of paper should be thrown into the vault and the contents covered with at least two inches of freshly burned unslaked lime, to which is then added the same amount of fresh soil.

Whenever a privy receives the discharges from a small-pox patient, even though disinfected, the vault should be treated as above after the recovery of the case or cases.

All domestic animals should be placed in absolute quarantine, and when found running at large should be promptly exterminated. When quarantine is lifted they should be disinfected as thoroughly as the patients.

CIRCULAR NO. 8.

QUARANTINE, ISOLATION AND DISINFECTION.

Instructions for the Regulation of Quarantine, Isolation and Disinfection in the Several Communicable Diseases.

Absolute quarantine includes first, absolute prohibition of entrance to or exit from the building or conveyance except by officers or attendants authorized by the health authorities, and the placing of guards if necessary to enforce this prohibition; second, the posting of a warning placard stating the name of the disease, in a conspicuous place or places on the outside of the building or conveyance; third, the prohibition of the passing out of any object or material from the quarantined house or conveyance; fourth, provision for conveying the necessities of life under restriction to those in quarantine.

Modified quarantine includes first, prohibition of entrance and exit, as in absolute quarantine except against certain members of the family authorized by the health authorities to pass in and out under certain definite restrictions; second the placing of a placard as before; third, isolation of

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patients and attendant; fourth, prohibition of the carrying out of any object or material unless the same shall have been thoroughly disinfected.

Absolute isolation includes first, the confinement of the patient and attendants to one apartment or suite of apartments, to which none but authorized officers or attendants shall have admission; second, the prohibition of passing out of the sick room of any object or material, until the same has been thoroughly disinfected; third, protection of the air of the house by hanging a sheet, kept constantly moist with a disinfectant solution, over the doorway of the patient's room or rooms and reaching from the top to the floor.

Modified isolation includes the confinement of the patient and attendants to one room or suite of rooms to which none but authorized officers or attendants shall have admission, but allowing the attendants to pass out of the room after disinfection of person and complete change of clothing; second, the prohibition of passing any object or material out of the sick room until it has been disinfected; third, protection of the doorway as before.

Special isolation includes first, prohibition of patient from attending any place of public assemblage; second, the providing of separate eating utensils for the patient; third, prohibition of sleeping with others or using same towels or napkins.

Disinfection may be either complete or partial.

By complete disinfection is meant disinfection during illness, under direction of attending physician, of patient's body, of all secretions, of all discharges of patient and of all articles of clothing and utensils used by patient; and after recovery, death or removal, the disinfection of walls, wood work, furniture, bedding, etc. (See Department's circular on Room Disinfection.)

By partial disinfection is meant, disinfection of discharges or excretions of patients and their clothing and the room or rooms occupied by the patient during illness.

Instructions for the Management of Cases of Communicable Disease and Contacts.

Diseases to be Reported.	Quarantine.	Isolation.	Disinfection.	Placard.	Quarantine Period.	Period of exclusion from school. (a.)	Exclusion from school after illness.
Actinomycosis, .....	.....	Special, ..	Partial, ..	.....	.....	.....	.....
Anthrax,	Absolute, ..	Absolute, ..	Complete, ..	.....	.....	.....	.....
Bubonic Plague,	Modified, ..	Modified, ..	Complete, ..	"	(b)	During illness, (d)	.....
Cerebrospinal Fever (Epidemic), .....	.....	.....	.....	.....	.....	.....	.....
Chickenpox,	Absolute, ..	Special, ..	Partial, ..	"	.....	21 days (d), ..	.....
Cholera,	Modified, ..	Absolute, ..	Complete, ..	"	(b)	.....	.....
Diphtheria,* .....	.....	Absolute, ..	Complete, ..	"	21 days (c),	During illness, (d)	30 days (e),
Epidemic Dysentery,	Modified, ..	Special, ..	Partial, ..	.....	.....	.....	30 days (e),
Erysipelas, .....	.....	Special, ..	Partial, ..	"	.....	.....	.....
German Measles,	Modified, ..	Modified, ..	Complete, ..	"	.....	21 days (d), ..	.....
Glanders, .....	.....	Special, ..	Partial, ..	.....	.....	.....	.....
Hydrophobia,†	Absolute, ..	Special, ..	Partial, ..	"	.....	.....	.....
Leprosy, .....	.....	Absolute, ..	Complete, ..	"	.....	.....	.....
Malarial Fever,‡	Modified, ..	Modified, ..	Complete, ..	"	(b)	.....	.....
Measles, .....	.....	Special, ..	Partial, ..	"	.....	21 days (d), ..	.....
Mumps, .....	.....	Special, ..	Partial, ..	"	.....	21 days (d), ..	.....
Pneumonia (true), .....	.....	Special, ..	Partial, ..	.....	.....	.....	.....
Puerperal Fever,	Modified, ..	Modified, ..	Complete, ..	"	(b)	During illness, (d)	30 days (e),
Relapsing Fever,§	Modified, ..	Absolute, ..	Complete, ..	"	30 days (f),	During illness, (d)	30 days (e),
Scarlet Fever,	Absolute, ..	Absolute, ..	Complete, ..	"	30 days (f),	During illness, (d)	30 days (e),
Smallpox,|| .....	.....	.....	.....	.....	.....	.....	.....

Instructions—(Continued.)

Diseases to be Reported.

	Quarantine.	Isolation.	Disinfection.	Placard.	Quarantine Period.	Period of exclusion from school. (a.)	Exclusion from school after illness.
Tetanus, .....	.....	Special, ..	Partial, ..	.....	.....	.....	.....
Trachoma, .....	.....	Special, ..	Partial, ..	.....	.....	.....	.....
Trichiniasis, .....	.....	.....	Partial, ..	.....	.....	.....	.....
Tuberculosis, ** .....	.....	.....	Partial, ..	.....	.....	.....	.....
Typhoid Fever, .....	.....	Special, ..	Complete, ..	.....	.....	.....	.....
Typhus Fever,	Absolute, ..	Absolute, ..	Complete, ..	"	(b)	.....	30 days (e).
Whoopingcough,	Modified, ..	Special, ..	Partial, ..	"	.....	Dur. illness(d),	.....
Yellow Fever,†	Absolute, ..	Absolute, ..	.....	"	(b)	.....	30 days (e).

*Immunize others exposed by the use of Diphtheria Antitoxin.

†County aid in treatment (Act May 31, '05).

‡Mosquito exclusion.

§Destruction of Suctorial insects.

||General vaccination.

**Destruction of Sputum by fire or germicides.

(a) School—Public, private, parochial, Sunday or other school.

(b) Quarantine continued until released by written order of the Commissioner of Health.

(c) Or 14 days from onset where two negative cultures are obtained from the diseased area on successive days, with such additional time as may be necessary, in the opinion of the attending physician, for the complete recovery of the case.

(d) Cases and contacts readmitted to school on certificate of physician, or Health Officer in cases where no physician has been or is in attendance which sets forth that all precautions have been observed to prevent the spread of disease.

(e) Cases and contacts readmitted to school on certificate of physician, which sets forth that thirty days have elapsed since recovery, death or removal of the last case and the disinfection of the premises.

(f) With such additional time as may be necessary, in the opinion of the attending physician, for the complete recovery of the case.

Date of onset reckoned from date of report to Health authorities.

Those actually suffering from the following diseases shall be excluded from school during illness and shall be readmitted on the certificate of a physician attesting to their recovery and non-infectiousness: Tonsillitis, Scabies (Itch), Pediculosis (Head and body lice), Trachoma, Impetigo Contagiosa, Favus, Acute Contagious Conjunctivitis (Pink Eye), Tinea Circinata, Erysipelas.

NOTE.—It is expected that the requirements of local Boards of Health shall conform to those of the Department of Health in communities outside their jurisdiction, but such requirements shall in no sense be construed as abrogating any additional precautionary measures enforced by local Boards of Health.

CIRCULAR NO. 9.

**PRECAUTIONS TO BE OBSERVED BY PHYSICIANS,
HEALTH OFFICERS, CLERGYMEN AND UNDERTAKERS
IN VISITING PREMISES INFECTED WITH
SMALLPOX.**

Whenever possible, physicians should not visit smallpox cases until after making all regular calls for that day.

If the physician has not been successfully vaccinated within five years vaccination should be attempted before attending such a case.

The physician should carry in a bag reserved for this purpose only, a gown which extends nearly to the floor, fitting close at the neck and wrists and entirely covering all clothing.

The bag should also contain a hood or protective covering for the hair and a pair of high, close-fitting rubbers.

The visit to the sick room should of course be as brief, and as free from unnecessary handling of the patient, as is consistent with a proper understanding of the patient's condition.

A small outer room or hallway in such a house should be set apart for the use of the physician where soap and water, towels and antiseptics are provided for the purpose of cleansing exposed surfaces. Upon entering this room after the visit to the patient, the rubbers, hood and gown should be removed, sprinkled well with Liquor Formaldehydi U. S. P. or formalin rolled into a compact bundle and placed within the bag into which the disinfectant should be again sprinkled.

When it is desirable to leave these articles at the house the rubbers may be wiped off with an officinal (U. S. P.) solution of Formaldehyde and the hood and gown boiled at least thirty minutes, wrung out and allowed to dry before the physician again visits the patient.

The physician should then thoroughly wash the hands, face and beard with soap and water.

The soap should be thoroughly removed and all exposed surfaces including the hair and scalp washed with a solution of corrosive sublimate (Bichloride of Mercury) 1-1000. This in turn may be removed with plain water.

The mouth and nose may be sprayed with a solution of equal parts of Liquor antisepticus (U. S. P.) and water.

When Health Officers are called upon to visit premises infected with Smallpox for any purpose they shall observe all the precautions advised for physicians.

When disinfecting such premises they should leave their gown and hood in the last room to be disinfected and never under any circumstances shall such protective garments be used in performing disinfection in a case of Diphtheria or Scarlet Fever or vice versa unless they have been thoroughly disinfected with an Official (U. S. P.) solution of Formaldehyde or formalin or have been boiled at least one hour in the meantime.

They should provide themselves with a number of gowns and hoods and a convenient canvas or leather bag to carry them in.

A glass stoppered bottle containing an official (U. S. P.) solution of Formaldehyde or formalin should also be carried in the bag for sprinkling infected gowns, hoods and the inside of the bag after such garments have been worn and replaced.

Clergymen shall not be denied the privilege of answering summons to attend a case of contagious disease. They must however, obtain instructions from the local Board of Health or the local representative of the State Department in case there is no Board of Health, and conform strictly to such instructions. In communities having no Board of Health they shall provide themselves with the protective gown, hood, etc., and disinfect subsequently in the manner suggested for physicians.

The undertaker like the physician and health officer should provide himself with a leather or canvas bag to be used only for the purpose of carrying protective gowns, hoods and rubbers to be worn whenever such bodies are to be prepared for burial. Such protective garments used by them should be well sprinkled with the Formaldehyde solution, rolled into a compact bundle and boiled at the earliest opportunity.

Upon leaving the premises the disinfection of exposed surfaces should be thorough as detailed under suggestions for physicians.

CIRCULAR NO. 10.

INSTRUCTIONS FOR THE DISINFECTION OF SCHOOLS.

The Department of Health makes it a rule and regulation, duly advertised according to law, that all school directors, trustees, principals and presidents of schools and colleges outside of cities in this State, for the protection of the health of all pupils and students, and of the entire community as well, pay prompt and regular attention to the disinfection of buildings used for educational purposes immediately after the discovery of any communicable disease within said building.

Each room should be disinfected separately. The room should be prepared by closing up all openings, such as windows, ventilators, registers, stove pipe holes and chimney places and hermetically sealing all cracks and crevices, as those around windows and doors and all keyholes. In short the room should be made as air-tight as possible. All desks, drawers and closets should be opened wide and all articles exposed. Books must be stood up on end and widely opened. Rugs, mats and articles of clothing, if any, must be hung up on cords.

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The disinfecting may be accomplished by spraying with an official (U. S. P.) solution of Formaldehyde or formalin.

Formaldehyde gas, however, is probably the best known aerial disinfectant, and one of the most effective and economical methods of generating it is as follows:

~~Six and one-half~~ ounces, by weight, of commercial Potassium Permanganate is required for each pint of solution, full strength. This is sufficient to disinfect 1,000 cubic feet of air space. In using formaldehyde gas for room disinfection it should be remembered that the room should always be both warm and moist. The latter may be accomplished by sprinkling the floors well or by suspending wet sheets about the room.

The following is the method:

The crystals of permanganate of potassium are to be placed in a tin, agate or iron pail the capacity of which is more than ~~eight~~ times the quantity of disinfectant to be used. This is necessary in order to prevent overflow from effervescence.

Place the pail containing the crystals at the centre of the room in a large pan with two blocks or bricks placed under the pail as considerable heat will be developed. The room having been properly sealed with strips of rubber adhesive plaster or of gummed paper, quickly pour the solution of formaldehyde out of a wide mouthed vessel upon the crystals and leave the room with all possible speed.

Then carefully seal up the door of exit on the outside; including the keyholes and crevices about the lock and door knob, and allow the room to remain closed at least six hours. Then open all doors and windows, to admit both fresh air and sunlight, and allow free ventilation to continue for six hours.

At the same time privy vaults should be disinfected by throwing into them milk of lime made by adding one part of freshly slaked lime to four times its volume of water. This should be used as soon as made. For each pupil in attendance a half gallon of this mixture should be allow-

ed. This preparation should not however, be introduced into water closets, as it may obstruct the pipes. For this purpose a 5 per cent. solution of carbolic acid or a 3 per cent. solution of an Official (U. S. P.) solution of Formaldehyde may be used. Careful attention should be given to the scrubbing and disinfection of coat closets.

Clothes closets, desks, etc., except those made of metal, should be washed with a cloth wrung out of a poisonous solution made by dissolving eight Bichloride of Mercury tablets in one gallon of hot water.

Metal fixtures may be treated in a similar manner using a solution made by adding four (4) ounces of pure carbolic acid to a gallon of hot water.

The balustrade of stairways and all knobs of doors should be wiped off daily with a cloth moistened with the formaldehyde or carbolic solution.

ISOLATION IN CASES OF CONTAGIOUS DISEASES.

Upon the appearance of contagious disease in a college dormitory, boarding school or seminary the patient should immediately be taken to a contagious disease hospital or an isolation building.

If this is not possible the patient and nurse or attendant must be strictly isolated to a room as remote as possible from other persons.

The room should be well lighted and ventilated and stripped of all unnecessary furnishings such as carpets, hangings, and upholstered furniture.

A bath and toilet should adjoin the sick room for the exclusive use of those isolated.

The nurse or attendant should wear only washable clothing which should include an additional gown and hood for the protection of the hair.

No article should leave the sick room until it has been thoroughly disinfected.

Secure any of the following disinfectants: An officinal (U. S. P.) solution of Formaldehyde, Kreolin, Lysol, Tri-Kresol or Chlorinated Lime, (Chloride of Lime or Bleaching Power).

Make up disinfectant solutions from the above by adding three teaspoonsful of Kreolin, Lysol or Tri-Kresol or eight teaspoonsful of an officinal (U. S. P.) solution of Formaldehyde to a pint of water, or one-half pound of Chlorinated Lime to one gallon of water.

Suspend across the doorway of the room reaching to the floor, a sheet which should be sprinkled at frequent intervals, keeping it constantly moist with the disinfectant solution used. The solution of Bichloride of Mercury previously mentioned is generally used for this purpose.

The solution of Lysol above mentioned makes a pleasant and most efficient disinfectant for the hands.

For the disinfection of alvine discharges and the discharges from the nose or any vomited matter the stock solution of lime, in amounts slightly in excess of the discharges, is most efficacious.

Bed and body clothing, towels, napkins, etc., should be soaked in a solution of chlorinated lime made by dissolving one quarter of a pound of chlorinated lime in ten gallons of water.

The tub containing the solution should be placed just outside the sick room door and the clothing deposited therein should be allowed to soak at least four hours before being removed to the laundry.

Eating utensils should be disinfected in any of the above solutions except lime.

The remnants of food sent to the sick room should be sprinkled with a disinfectant solution and burned.

Upon the recovery of a case of contagious disease the patient and nurse must each take an antiseptic bath, especial attention being paid to the disinfection of the hair and scalp.

After bathing they may be wrapped in a clean sheet handed them from without and step into a room within which their clothing has been recently disinfected, to dress.

For the antiseptic bath use a solution made in the proportion of two Bichloride of Mercury tablets to the gallon of hot water.

Following this each should take a plain soap and water bath and thereafter leave the infected room as detailed above.

For additional information see Instructions in Room Disinfection, and the Management of the various infections.

In case of smallpox, vaccination and re-vaccination of the entire school should be performed at once.

During the disinfection of school buildings the books should be strung on cords or stood on end with the leaves widely separated in a cloak room or closet where they will be subjected to the vapor of concentrated formaldehyde gas.

During the prevalence of communicable disease pupils should not be permitted to take school books to their homes.

Books known to have been taken to infected houses should be destroyed by burning.

CIRCULAR NO. 11.

RULES TO BE OBSERVED BY PATIENTS, NURSES AND ATTENDANTS IN THE MANAGEMENT OF PULMONARY TUBERCULOSIS (CONSUMPTION).

Those suffering from Consumption should remember that the disease in many instances is curable and far more important, they should never forget that the disease is preventable.

Since the specific micro-organism (Tubercle Bacillus) is known to be the cause of the disease and not often inherited—it is of **vital importance** to destroy this infective agent wherever evidence of its presence is discovered in stamping out the disease.

In addition to the proper care of the patient's discharges the ingestion of infected food stuff must be considered.

It is certain that the milk of cows suffering from Tuberculosis of the udder is usually infectious and the milk from cattle so affected should be condemned as unfit for use.

The sufferer from Tuberculosis who would recover must first learn that it is essential to disinfect the sputum.

If patients are careless with regard to the care of their sputum (spit) they are frequently reinfected and infect others.

Every drop of sputum should be collected and disinfected, preferably by burning. Whenever possible use a spit cup; if made of tin or china add a small quantity of water and a teaspoonful of ordinary lye for the reception of the sputum.

Many cups are lined inside with a paper spit cup which when full may be removed and burned.

All such cups should have a handle so that the vessel can be held close to the mouth preventing soiling of the fingers and sides of the cup.

It should also be provided with a cover for the purpose of excluding flies and other insects which are capable of carrying the infection.

After emptying a cup of any kind always scald it in boiling water before it is again used.

Rags and handkerchiefs should not be used to spit in; paper napkins are preferable and should always be burned before the sputum becomes dry.

While traveling, paper napkins so used may be kept in a paper bag and burned at a convenient time.

Patients suffering from this disease should occupy a con-

stantly well ventilated sunny room divested of unnecessary furniture such as carpets and hangings. The outer covering on such a patient's bed should be of material that may be frequently boiled and washed.

Never allow spit to be deposited on bed or body clothing, carpets or furniture, or in fact in any place where it may become dry. Patients should always sleep alone and use individual eating utensils which should be scalded after use.

Male patients should also be clean shaven as the beard, especially about the mouth, is invariably infected and is undoubtedly responsible for reinfection of many cases.

Clothing, towels, handkerchiefs or other personal effects used by a consumptive should not be used in common by others.

Kissing and hand shaking should be avoided by such patients and when the coughing cannot be controlled they should carefully cover the mouth and nose with a paper napkin during the same.

The hands should be washed with soap and water before eating and always immediately after being soiled with sputum.

A consumptive mother should not nurse her infant or occupy the same sleeping chamber with it. The bowel discharges of patients having abdominal pain and intractable diarrhoea should be disinfected by the addition of an equal amount of a solution made by dissolving eight ounces of chlorinated lime (chloride of lime-bleaching powder) in one gallon of water.

Occupations requiring the handling of food stuffs or those necessitating confinement in crowded ill-ventilated or dusty quarters should never be followed by such a patient.

The greatest enemies of Tuberculois are pure air and sunlight.

Such a patient should lead an outdoor life exercising only on the advice of a physician and never to the extent of fatigue.

A broom or dry duster should never be used in such a patient's room.

Cleansing, except for metal fixtures should be done with a cloth moistened in a solution made by dissolving eight Bichloride of Mercury tablets in one gallon of water.

This solution is very poisonous when taken internally and care should be exercised in its use.

Room fixtures, bed and body clothing used by such a patient should be taken out of doors frequently and exposed to pure air and sunlight for several hours.

It is now known beyond question of doubt that many people contract Tuberculosis in dark, ill-ventilated sleeping rooms that have previously been occupied by a person suffering from the disease. It is therefore imperative that such a room should be plainly furnished permitting of ready cleansing as noted above and that upon the recovery or removal of such a patient the room and its contents should be thoroughly disinfected (See Room Disinfection).

CIRCULAR NO. 13.

RULES TO BE OBSERVED IN THE CARE AND MANAGEMENT OF CASES OF SMALLPOX.

Smallpox is one of the most readily communicable of all infections. It may be communicated at any period from the first symptoms of the disease to the falling off of the last scab or crust.

While it is probable that the danger is less before the appearance of the eruption, it is nevertheless of importance to isolate exposed individuals on the first suspicious symptoms of the disease. Upon the discovery of a case suspected of being smallpox all exposed persons must be promptly vaccinated and kept under daily observation by health authorities until a diagnosis has been reached.

The disease does at times appear in a very mild form, being regarded by many people and some physicians as varioloid and in many instances pronounced chickenpox, but it should be remembered that the most malignant type of the disease may be contracted from a mild case of smallpox be it designated as such or as varioloid which many people have the erroneous idea is not smallpox.

Any considerable outbreak of an acute disease accompanied by fever and an eruption of pocks *among adults* in any community should be regarded with a great deal of suspicion for it is probable that the disease is smallpox, however mild its manifestations.

This should emphasize the importance of physicians and householders reporting cases of chickenpox to the health authorities.

ISOLATION.

Whenever it may be possible, cases of smallpox should be removed at once to a contagious disease hospital for treatment.

All communities should have such a building available in a location remote from other habitations where strangers and others suffering from smallpox and having no other place of refuge may be taken for treatment.

Any isolated building suitable for occupancy may be rented or in great emergency seized and used as a hospital, and the damages adjusted with the owner later.

When it is impossible to remove cases to an isolation hospital the buildings must at once be quarantined and the case be absolutely isolated to a single room, however mild the disease may be, until the final disinfection of the patient, nurse or attendant, effects and premises have been accomplished.

Isolation of all cases of smallpox from other members of the family although quarantined should always be observed for the purpose of limiting the dissemination of the contagion throughout the entire building as much as

possible, thereby saving unnecessary destruction of household effects.

The nurse or attendant should wear washable clothing and over all, a washable gown with hood attachment for the protection of the hair. The gown and hood should be removed and exposed surfaces disinfected when leaving the sick room even though temporarily.

The sick room should be well lighted and ventilated, screened from flies and divested of all unnecessary furniture, carpets and hangings. Suspend over the doorway of the room, reaching from the top to the floor, a sheet, which should be kept moist with a solution made by dissolving eight (8) Bichloride of Mercury tablets in a gallon of hot water.

Physicians are expected to carry in a bag, kept especially for this purpose, a washable gown, together with overshoes, which after the visit should be sprinkled liberally with at least two ounces of an officinal (U. S. P.) solution of Formaldehyde, then rolled into a compact bundle and the fabrics boiled at frequent intervals.

A room in the dwelling should be set apart for the exclusive use of the physician, in which he may make the necessary changes of clothing and properly disinfect exposed surfaces, including hair and beard. The nurse or attendant should show unmistakable evidence of having had smallpox or else of having been successfully vaccinated within five years, and should be again vaccinated prior to assuming charge of a smallpox case.

QUARANTINE AND DISINFECTION DURING ILLNESS.

Houses infected with smallpox shall, in all cases be conspicuously placarded and the quarantine of their occupants shall be absolute.

When establishing quarantine all members of the household, including temporary residents after the appearance of the eruption and others known to have been exposed shall be at once located and quarantined.

Such persons may however, after subjecting themselves to vaccination and thorough disinfection of clothing and

person, under the supervision of an authorized agent of the Department of Health be paroled under observation during a period of eighteen (18) days from the date of last exposure.

By "parole under observation" is meant that all persons so liberated shall have their temperature taken daily by a physician appointed by an authorized agent of the Department of Health, who shall promptly quarantine any such person presenting any physical sign or symptom of smallpox until it is certain that such person is not suffering from that disease.

Upon the refusal of any person exposed to smallpox to be vaccinated and to perform the required disinfection as detailed above, such person or persons shall be subject to absolute quarantine for a period of eighteen (18) days from the date of last exposure together with the minimum period of quarantine, and such additional time as may be necessary for their complete recovery in the event of their contracting the disease.

In all cases where it is apprehended that attempts to avoid quarantine regulations will be made, a sufficient number of guards should be placed over the premises to insure strict compliance with the same.

In all cases provision shall be made whereby those in quarantine will be provided with necessary food, medicine, etc. A day and a night guard are necessary for the delivery of such supplies, the transmission of oral messages from the household and for answering emergency calls, for physicians and other purposes.

Provisions, medicine, supplies, mail matter, etc., shall be left by the guard in a convenient location where they may be reached by the inmates without the latter going outside the infected house.

No article of any sort whatsoever shall be removed from the premises.

All communication between quarantined persons and the public must be by word of mouth and never written.

Domestic pets of such a household should be confined

to the house and when found running at large should be promptly exterminated. When quarantine is lifted they should be disinfected as thoroughly as the occupants of the premises.

Prior to patients' release from an isolated room or from quarantine they should be free from every vestige of the disease.

The skin should be free from pocks, smooth, save for pitting, and perfectly healed wherever invaded.

Particular attention should be given the scalp, palms of the hands and soles of the feet in the removal of scabs and mahogany colored pocks.

This is also true of the cavities of the nose and ears and careful attention should be given these details.

When quarantine is to be lifted the occupants of the household should take an antiseptic bath, especial attention being paid to the disinfection of the hair and scalp.

For the antiseptic bath use a solution made in the proportion of two Bichloride of Mercury tablets to the gallon of hot water, this to be followed by a plain soap and water bath.

After bathing they should be wrapped in a clean sheet, handed them from without, and step into a room within which their clothing has been recently disinfected.

As disinfectant agents are poisonous when taken internally, such drugs and solutions should always be plainly labelled and kept out of the reach of children.

No article should leave the sick room until it has been thoroughly disinfected.

Secure any of the following disinfectants: an officinal (U. S. P.) solution of Formaldehyde, Kreolin, Lysol or Chlorinated Lime (Chloride of Lime or Bleaching Powder).

Make up disinfectant solutions from the above by adding three teaspoonfuls of Kreolin, Lysol or Tri-Kresol or eight teaspoonfuls of an officinal (U. S. P.) Formaldehyde, to a pint of water or one-half pound of Chlorinated Lime to one gallon of water.

All discharges from the patient, of whatever kind, must be received in vessels containing a sufficient quantity of a disinfectant solution to cover and thoroughly disinfect them. Cloths soiled with pus or blood from ulcerating or suppurating surfaces or pustules must be burned.

The discharges may be emptied in a sewer after disinfection, but in case this is done the closet should be repeatedly flushed to prevent injury to the plumbing from the chemicals used.

If a privy vault is used, empty one and a half ($1\frac{1}{2}$) pounds of Chlorinated Lime (Chloride of Lime or bleaching powder) dissolved in three gallons of water into the vault daily.

A large tub should be placed outside the door of the sick room for the purpose of disinfecting every article of clothing before it is carried through the house. A standard solution of Chlorinated Lime (Chloride of Lime, bleaching powder) one-quarter ($\frac{1}{4}$) of a pound to eight (8) gallons of soft water, should be kept in the tub and renewed at frequent intervals. All towels, napkins, sheets, bandages and clothing used either by the patient, or the attendant, should be immediately immersed in the tub and remain at least three hours after which they should be boiled for at least one hour. Cups, plates, spoons and other eating utensils before leaving the sick room should be immersed for an hour in a solution of Carbolic Acid made by dissolving six (6) ounces of pure Carbolic Acid in a gallon of hot water and then boiled for half an hour. All food or drink exposed to infection and not consumed by the patient should be sprinkled with this solution of carbolic acid and then burned or buried.

Following the recovery, death or removal of the patient, the premises must be thoroughly disinfected with formaldehyde gas combined with sulphur disinfection. Mattresses and bedding soiled by discharges should be burned as well as books and other inexpensive articles handled by patients.

The minimum period of quarantine in cases of smallpox

shall be thirty (30) days from onset together with such additional time as may be necessary for the complete recovery of the case and absolute freedom from contagion.

In the event of death from smallpox the funeral shall be strictly private and burial made within thirty-six (36) hours.

The law forbids children or others, living in a house in which smallpox appears, from attending school prior to the elapse of thirty (30) days after the recovery, death or removal of the last case and the disinfection of the premises.

The use of the word school wherever it occurs in the regulations of the Department, shall mean public, private, parochial, Sunday or other school.

CIRCULAR NO. 14.

VACCINATION.

Smallpox is no respecter of persons save those who maintain immunity to it by vaccination, re-vaccination or having experienced the infection itself.

The only means of preventing this loathsome disease is vaccination and re-vaccination; the disease never gaining a foothold in a country or community where its people have observed this precaution.

The history of countless epidemics of smallpox in cities in various parts of this country and abroad show that vaccination has been the all important factor in its suppression.

The following is merely an example of many instances of a similar nature: "At Gloucester, England, in 1895, after eight years of practical abandonment of compulsory vaccination, that is to say, of neglect on the part of the authorities to enforce the law, an epidemic of smallpox occurred in what was practically an unvaccinated commun-

ity. The cases increased at such a rate that great alarm was felt and extensive measures were taken for general vaccination. In the closing weeks of 1895, 31 cases occurred. In January 28 more were reported. In February the number increased suddenly to 146, and during March to 644. Toward the last of that month, the authorities gave directions for enforcement of the law, and work was begun; but during the following month, no less than 744 cases occurred. During the last days of April, a committee undertook general vaccination of the city, and within a very few days, every house had been visited; by the end of June, the city had been converted from a practically unvaccinated to the best vaccinated city in the country. Nearly 36,000 persons were operated on; the epidemic began at once to decline, and before August had disappeared. Nearly 450 persons, however, had died, and 1,600 others among the survivors bore the usual lasting evidence of the disease in their faces.

As showing the influence of revaccination, the following figures from a study of the statistics of the Sheffield epidemic are presented:

Rates of Attack per 1,000 Persons.

Persons not vaccinated,	94
Persons once vaccinated,	19
Persons twice vaccinated,	3

Death-rates per 1,000 persons.

Persons not vaccinated,	51
Persons once vaccinated,	1
Persons twice vaccinated,	0.08

Similar facts are yielded by investigation of all epidemics where there is a large class of vaccinated and another of unvaccinated persons, and yet anti-vaccinationists still agitate and find sympathetic listeners to their arguments." (Practical Hygiene—Harrington P. 759).

Such are the invariable results that follow proper vaccination and revaccination.

Laboratory research has conclusively proven that glycerin exercises a preservative action upon vaccine virus and in time destroys the vitality of bacteria.

Doubtless the glycerinated lymph in heremetically sealed glass tubes is the most satisfactory product in use at the present time.

The emulsion should be at least two months old and its use limited to the following two months.

With such virus, and a proper surgically clean scarification on a clean arm which is kept clean, without interference to the resulting sore or scab, a successful result is almost sure to be obtained.

This of course implies that the operators' hands and instruments should be surgically clean as well as the field of operation.

The part should be prepared (preferably the left arm if the person is right handed) by thorough washing with soap and water—rubbing sufficiently to produce a slight surface redness—after which the part should be rinsed with boiled water and then by alcohol.

If the subject be a male, scarify over the insertion of the deltoid; if a girl, higher up or near the shoulder or on the leg if desired.

The lymph should be forced out of the tube upon the disinfected skin by means of a rubber bulb. It should never be blown out of the tube.

Grasp the arm with the hand, rendering the skin tense over the site of operation and with a scalpel or needle that has been sterilized in a flame, gently scrape and scarify the area covered by the drop of lymph until the true skin is bared.

A space of an eighth of an inch in diameter should be scarified. Always endeavor to avoid bringing blood.

After allowing the area to dry, a clean soft handkerchief or a soft cotton cloth (recently sterilized by boiling) is

fastened to the shoulder of the under garment in such a manner that it will hang down over the wound thus preventing irritation from rubbing of the clothes. No other dressing is necessary.

The following well known succession of events appearing ordinarily after a successful inoculation should be explained fully to patients or their family who should be instructed to consult a physician in the event of untoward symptoms.

Within three to five days, according to the activity of the virus, vesicles appear at the edges of the scarification and an area of redness appears around it which is attended by considerable itching. Patients should be especially cautioned never to scratch it or permit dirt of any kind to get into the wound.

About this time the glands under the arm may become slightly swollen and tender, and there may be slight fever and loss of appetite. About the tenth day the sore begins to dry with the formation of a scab a few days later.

They should be instructed to observe care not to injure the scab, but allow it to dry up and fall off spontaneously, after which it should be burned.

Upon the appearance of the typical vesicle and resulting sore a certificate of successful vaccination may be issued but never before.

The protection of such a vaccination may endure during life, but experience has shown that absolute immunity has been lost in some cases after a period of five years; therefore it is advisable to have the operation repeated at intervals of five years and always when smallpox appears.

If subsequent vaccinations "take" it is thereby demonstrated that they were necessary; if not, the condition of immunity is altogether probable.

Unless the characteristic scar follows an inoculation it is probable that the attempt was unsuccessful or that an infection occurred.

Unless infants are sickly, presenting evidence of malnu-

trition or functional disturbance occasioned by dentition, diarrhoea or indigestion and except during the period of weaning, they should be vaccinated before the expiration of the first year. If smallpox appears, the operation should be performed at once.

The popular impression that vaccination should only be performed in the Spring and Fall is of course erroneous and it is the duty of physicians to dispel such errors as well as doubts as to the efficacy of vaccination and revaccination in preventing smallpox.

CIRCULAR NO. 15.

TO ALL SCHOOL DIRECTORS, PRINCIPALS AND TEACHERS IN PENNSYLVANIA.

Section 1. Your attention is respectfully directed to Decision III of the Compilation entitled "The Common School Laws of Pennsylvania and Decisions of the Superintendent," which reads (Page 184): "Suspension is the separation of the pupil for a limited time from the school and it may be either for bad conduct, for absence, or as a sanitary measure."

Section 2. Also to section LXXVIII which rehearses Section 11 of the Act of Assembly of the 18th of June. 1895, which reads, "No child or other person belonging to, or residing with the family or any person residing in the same house in which any person may be located who is suffering from cholera, smallpox (variola or varioloid), scarlet fever, typhus fever, yellow fever, relapsing fever, diphtheria (diphtheritic croup, membranous croup) or leprosy shall be permitted to attend any public. private, parochial, Sunday or other school in said municipalities and all principals, Sunday School superintendents or other persons in charge of such schools, are hereby required to ex-

clude any and all such children and persons from said schools, such exclusion to continue for a period of thirty days following the discharge by recovery or death of the person last afflicted in said house or family, or his or her removal to a hospital, and the thorough disinfection of the premises, and all such children or other persons as aforesaid, before being permitted to attend or return to school, shall furnish to said principal or other person in charge of said schools a certificate signed by the medical attendant of said children or persons, or by a physician to be designated by the health authorities of said municipalities, setting forth that the thirty days mentioned in this section have fully expired: Provided, however, That the health authorities may by rule or regulation provide that such certificate shall only be given by a person to be designated by such authorities and in such case no other certificate shall be recognized.

Section 3. In order to carry out the provisions of the Act of Assembly of the 27th of April, 1905, for the protection of the lives and health of the people of the State of Pennsylvania, the Department of Health has adopted rules and regulations, which have been duly advertised according to law, to the effect that "No child or other person belonging to, or residing with the family of any person or residing in the same house in which any person may be located who is suffering from Epidemic Cerebrospinal Meningitis (Spotted fever), Whoopingcough, Measles, German Measles, Mumps or Chickenpox shall be permitted to attend any public, private, parochial, Sunday or other school and all principals, Sunday school superintendents or other persons in charge of such schools. are hereby required to exclude any and all such children and persons from said schools for the periods hereinafter fixed.

The following minimum periods of exclusion shall be observed and the return to school in each instance shall be only upon the certificate of a physician or of a health officer, in cases where no physician has been or is in atten-

dance, setting forth that proper precautions have been taken for the prevention of the spread of disease.

Epidemic Cerebrospinal Meningitis (Spotted Fever), Certificate of physician.

Whoopingcough,Certificate of physician.

Measles,21 days from onset—Certificate of physician.

German Measles, 21 days from onset—Certificate of physician.

Mumps,21 days from onset—Certificate of physician.

Chickenpox, 21 days from onset—Certificate of physician.

Section 4. In addition to the diseases which the Act of June 18, 1895, declares shall exclude from school, children who are exposed to them, and those diseases to which attention has been called in Section 3, there are certain others to which this prohibition is hereby extended, but only in the case of those who are actually affected, and these shall be re-admitted upon the physician's certificate attesting only the recovery of the patient.

The diseases are as follows:

Tonsillitis.

Scabies (Itch).

Pediculosis Capitis (Head lice).

Pediculosis Corporis (Body lice).

Trachoma.

Impetigo Contagiosa.

Favus.

Acute Contagious Conjunctivitis (Pink Eye).

Tinea Circinata.

Erysipelas.

Section 5. Your attention is also directed to the requirement of Section 12 of the Act of Assembly of June 18th, 1895, which declares that "All principals or other persons in charge of schools as aforesaid (namely, public, private, parochial, Sunday or other schools) are hereby required to refuse the admission of any child to the schools under their charge or supervision, except upon a certificate signed by a physician, setting forth that such child has been suc-

cessfully vaccinated, or that it has previously had small-pox."

Section 21 of the same Act provides that the penalty for failure, neglect or refusal to comply with, or violation of this requirement shall, for every such offence, upon conviction thereof, before any mayor, burgess, alderman, police magistrate or justice of the peace, be a fine or penalty of not less than five dollars or more than one hundred dollars, and in default of payment thereof, imprisonment in the county jail for a period not exceeding sixty days.

Careful compliance with these regulations and recommendations will greatly diminish the prevalence of communicable diseases among children, elevate their general standard of health, prevent much suffering and discomfort, and increase the capacity of many of the scholars for study.

CIRCULAR NO. 17.

RULES TO BE OBSERVED IN THE CARE AND MANAGEMENT OF CASES OF MEASLES AND GERMAN MEASLES.

Measles is by no means the harmless disease it is thought to be by many people, since it is shown by the statistics of the Department of Health that in some epidemics more children die from measles than from Scarlet Fever.

For this reason it is imperative that a physician be summoned and every possible effort made to check the spread of the disease.

Although German measles is comparatively a harmless disease, its management for every practical purpose should be essentially the same as that of measles.

The patient should be confined to one room with windows

screened, which room should be well lighted and ventilated and as remote as possible from other occupied rooms in the house.

There should be neither carpets, curtains or upholstered furniture in the room. In order to confine the infection to this room a sheet kept constantly moist with a solution of corrosive sublimate (Bichloride of Mercury 1-1000) should be hung over the door-way.

To prepare this solution, dissolve eight (8) Bichloride of Mercury tablets in one gallon of hot water.

An abundance of fresh air should be admitted to the room, but the patient should be protected from direct draughts and strong light.

The air of the sick room cannot be disinfected during its occupancy by the patient.

The practice of hanging up cloths saturated with carbolic acid or placing saucers of Chlorinated Lime or proprietary disinfectants in the sick room is not only annoying to the patient, but utterly useless if not injurious.

All bed and body clothing, including handkerchiefs, towels, napkins, cloths, etc., used for the collection of discharges from the mouth and nose should be disinfected before leaving the sick room.

For this purpose, use a solution made by dissolving one-quarter ($\frac{1}{4}$) of a pound of Chlorinated Lime (bleaching powder) in eight gallons of water, allowing such articles to remain in the solution at least three hours before being washed.

Eating utensils should be scalded and remnants of food destroyed by burning.

None but those actually in attendance upon the patient should be permitted to enter the sick room or come in contact with the patient.

The nurse or attendant should wear only washable clothing with a protective gown and covering for the hair and when leaving the sick room should remove such protective garments and disinfect exposed surfaces.

When the attending physician announces recovery, the patient should be given an antiseptic bath under the direction of the doctor, especial attention being paid to the disinfection of the hair and scalp.

The antiseptic bath may be prepared by dissolving two Bichloride of Mercury tablets to the gallon of hot water this is to be followed by a plain soap and water bath. After bathing, the patient should be wrapped in a clean sheet handed from without and step into a clean room to dress.

Following the recovery, death or removal of the patient, the sick room and its contents should be disinfected with formaldehyde gas. This gas may be liberated by the addition of a forty per cent. solution of formaldehyde to potassium permanganate. Six and one-half ($6\frac{1}{2}$) ounces, by weight, of commercial potassium permanganate crystals is required for each pint of the formaldehyde solution. This amount of chemicals is sufficient to disinfect a room ten feet square. In using Formaldehyde gas for disinfection, the air of the room should be both warm and moist. The latter may be accomplished by sprinkling the floor or by suspending wet sheets around the room.

Place the crystals in a tin, agate or iron pail, the capacity of which is over eight times the quantity of disinfectants to be used. This is necessary to prevent over-flow of the solution due to effervescence.

The pail containing the crystals should be placed at the centre of the room in a tub or dish pan with a non-conductor such as a stove lid or bricks under it, since considerable heat is given off on mixing the chemicals.

In the preparation of the room for such disinfection, it should be sealed with strips of gummed paper or surgeons' plaster, closing flues, ventilators, chimney places and all visible cracks and crevices about walls, doors and windows. Open up beds, stand mattresses on end, open closets, bureau

drawers, trunks, etc., and spread their contents about the room.

Fabrics, especially carpets, bed and body clothing fully unfolded, should be suspended upon chairs, clothes-lines, bedsteads, etc., exposing all to the fumes of the gas.

When the room is properly sealed, pour the Formaldehyde solution upon the crystals from a wide-mouthed vessel that it may be done quickly and make a hasty retreat.

Carefully seal the door of exit, including the key-hole and crevices about the door knob and allow the room to remain closed at least six hours.

After disinfection soak bed and body clothing, etc.. in a solution made by dissolving four (4) ounces of Chlorinated Lime (Chloride of lime or bleaching powder) in eight (8) gallons of water.

After remaining in this solution for three hours they should be removed and boiled at least one hour.

After the necessary cleaning the windows should be opened and the room thoroughly aired for two days before it is again occupied.

As disinfectant agents are poisonous when taken internally, such drugs and solutions should always be plainly labelled and kept out of the reach of children.

Those suffering from this disease will not be permitted to attend school prior to the issuance of a certificate of recovery by the attending physician, or in cases where no physician has been in attendance, a certificate from the Health Officer which sets forth that all precautions have been observed to prevent the spread of disease.

Other children in the households not contracting the disease at the end of twenty-one (21) days from the date of the first appearance of the disease in the house may return to school provided they have not been exposed to the sick for that length of time.

The use of the word school, wherever it occurs in the

regulations of the Department shall mean, public, private, parochial, Sunday or other school.

CIRCULAR NO. 18.

RULES TO BE OBSERVED IN THE CARE AND MANAGEMENT OF CASES OF WHOOPINGCOUGH.

Whoopingcough, with its associated complications is a very fatal disease, especially in infants and young children, therefore it is always advisable to summon a physician and make every possible effort to prevent the spread of the disease.

The patient should be kept entirely away from other children or adults who have not had the disease.

If confined to a room, the windows should be screened, and all upholstered furniture and curtains should be taken out.

An abundance of fresh air should be admitted to the room, but the patient should be protected from direct draughts.

The air of the sick room cannot be disinfected during its occupancy by the patient.

The practice of hanging up cloths saturated with carbolic acid or of placing saucers of Chlorinated Lime or proprietary disinfectants in the sick room is not only annoying to the patient, but utterly useless, if not injurious.

All bed and body clothing, including handkerchiefs, towels, napkins, cloths, etc., used for the collection of discharges from the mouth and nose, or soiled by vomited matter, should be disinfected before being taken from the sick room.

For this purpose, use a solution made by dissolving one-quarter ($\frac{1}{4}$) of a pound of Chlorinated Lime (Bleaching

Powder) in eight (8) gallons of water, allowing such articles to remain in the solution at least three hours before being washed.

All eating utensils should be scalded and remnants of food burned.

Following the recovery, death or removal of the patient the sick room and its contents should be disinfected with formaldehyde gas. This gas may be liberated by the addition of an officinal (U. S. P.) solution of formaldehyde to potassium permanganate. Six and one-half ($6\frac{1}{2}$) ounces, by weight, of commercial potassium permanganate crystals is required for each pint of the formaldehyde solution. This amount of chemicals is sufficient to disinfect a room ten feet square. In using Formaldehyde gas for disinfection, the air of the room should be both warm and moist. The latter may be accomplished by sprinkling the floor or by suspending wet sheets around the room.

Place the crystals in a tin, agate or iron pail, the capacity of which is over eight times the quantity of disinfectants to be used. This is necessary to prevent overflow of the solution due to effervescence.

The pail containing the crystals should be placed at the centre of the room in a tub or dish pan with a non-conductor such as a stove lid or bricks under it, as considerable heat is given off upon mixing the chemicals.

In the preparation of the room for such disinfection, it should be sealed with strips of gummed paper or surgeons' plaster, closing flues, ventilators, chimney places and all visible cracks and crevices about walls, doors and windows. Open up beds, stand mattresses on end, open closets, bureau drawers, trunks, etc., and spread their contents about the room.

Fabrics, especially carpets, bed and body clothing fully unfolded, should be suspended upon chairs, clothes-lines,

When the room is properly sealed, pour the Formaldehyde solution upon the crystals from a wide mouthed

vessel that it may be done quickly and make a hasty retreat.

Carefully seal the door of exit, including the key-hole and crevices about the door knob and allow the room to remain closed at least six hours.

After the necessary cleaning the windows should be opened and the room thoroughly aired for two days before it is again occupied.

As disinfectant agents are poisonous when taken internally, such drugs and solutions should always be plainly labelled and kept out of the reach of children.

Those suffering from this disease will not be permitted to attend school prior to the issuance of a certificate by the attending physician, or in cases where no physician has been in attendance, a certificate from the Health Officer which sets forth that all precautions have been observed to prevent the spread of disease.

Other children in the households not contracting the disease at the end of twenty-one (21) days from the date of the first appearance of the disease in the house may return to school provided they have not been exposed to the sick for that length of time.

The use of the word school, wherever it occurs in the regulations of the Department shall mean, public, private, parochial, Sunday or other school.

CIRCULAR NO. 19.

RULES TO BE OBSERVED IN THE CARE AND MANAGEMENT OF CASES OF MUMPS.

Mumps, even uncomplicated, is a painful affection, although not a dangerous one, but since the complications

which often arise are of a serious nature, it is always advisable that persons so afflicted should be under the care of a physician.

In order to protect others from infection, it is advisable to confine the patient to one room, with windows screened, which room should be well lighted and ventilated. If possible a room with Southern exposure and remote from other occupied rooms in the house.

None but those actually in attendance upon the patient should be permitted to enter the sick room or come in contact with the patient.

Eating utensils should be scalded and remnants of food destroyed by burning.

The air of the sick room cannot be disinfected during its occupancy by the patient.

The practice of hanging up cloths saturated with carbolic acid, or placing saucers of Chlorinated Lime or preparatory disinfectants in the sick room, is not only annoying to the patient, but utterly useless if not injurious.

Soiled bed and body clothing, including handkerchiefs or clothes used for the collection of discharges from the nose and mouth should be immediately placed in an antiseptic solution and allowed to soak for a period of three hours before being washed.

For this purpose use a solution made by dissolving one-quarter ($\frac{1}{4}$) of a pound of chlorinated lime (bleaching powder) in eight gallons of water.

When, in the opinion of the attending physician, recovery has taken place, the patient should receive a cleansing bath and be provided with clean clothes.

After the recovery and removal of the patient the room, and everything it contains, should be disinfected with Formaldehyde gas. This gas may be liberated by the addition of an officinal (U. S. P.) solution of Formaldehyde to potassium permanganate. Six and one-half ($6\frac{1}{2}$) ounces by weight of commercial potassium permanganate crystals is

required for each pint of the Formaldehyde solution. This amount of chemicals is sufficient to disinfect a room ten feet square. In using Formaldehyde gas for disinfection, the air of the room should be both warm and moist. The latter may be accomplished by sprinkling the floor or by suspending wet sheets around the room.

Place the crystals in a tin, agate or iron pail, the capacity of which is over eight times the quantity of the disinfectants to be used. This is necessary to prevent overflow of the solution due to effervescence.

The pail containing the crystals should be placed at the centre of the room, in a tub or dish pan with a non-conductor such as a stove lid or bricks under the pail, as considerable heat is given off on mixing the chemicals.

In the preparation of the room for such disinfection, it should be sealed with strips of gummed paper or surgeons' plaster, closing flues, ventilators, chimney places and all visible cracks and crevices about walls, doors and windows. Open up beds, stand mattresses on end, open closets, bureau drawers, trunks, etc., and spread their contents about the room.

Fabrics, especially carpets, bed and body clothing fully unfolded, should be suspended upon chairs, clothes-lines, bedsteads, etc., exposing all to the fumes of the gas.

When the room is properly sealed, pour the Formaldehyde solution upon the crystals from a wide mouthed vessel, that it may be done quickly, and make a hasty retreat.

Carefully seal the door of exit, including the key-hole and crevices about the door knob, and allow the room to remain closed at least six hours.

After disinfection soak bed and body clothing, etc., in a solution made by dissolving four (4) ounces of Chlorinated Lime (Chloride of Lime or Bleaching powder) in eight (8) gallons of water.

After remaining in this solution for three hours they should be removed and boiled.

After the necessary cleaning the windows should be opened and the room thoroughly aired for two days before it is again occupied.

As disinfectant agents are poisonous when taken internally, such drugs and solutions should always be plainly labelled and kept out of the reach of children.

Those suffering from this disease will not be permitted to attend school prior to the issuance of a certificate by the attending physician, or in cases where no physician has been in attendance, a certificate from the Health Officer, which will set forth that all precautions have been observed to prevent the spread of disease.

Other children in the households not contracting the disease at the end of twenty-one (21) days from the date of the first appearance of the disease in the house may return to school provided they have not been exposed to the sick for that length of time.

The use of the word school, whenever it occurs in the regulations of the Department shall mean public, private, parochial, Sunday or other school.

CIRCULAR NO. 20.

RULES TO BE OBSERVED IN THE CARE AND MANAGEMENT OF CASES OF CHICKENPOX.

While Varicella or Chickenpox itself is recognized as a comparatively harmless disease, yet because of the fact that Smallpox is so frequently mistaken for it in its early stages, it is always advisable to summon a physician.

It is also advisable to confine the patient to one room, with windows screened, which room should be well lighted and ventilated. If possible a room with Southern exposure and remote from other occupied rooms in the house.

There should be neither carpets, cutains nor upholstered furniture in the room. In order to confine the infection to this room a sheet kept constantly moist with a solution of corrosive sublimate (Bichloride of Mercury 1-1000) should be hung over the doorway.

To prepare this solution, dissolve eight (8) Bichloride of Mercury tablets in one gallon of hot water.

The air of the sick room cannot be disinfected during occupancy by the patient.

The practice of hanging up cloths saturated with carbolic acid or of placing saucers of Chlorinated Lime or proprietary disinfectants in the sick room is not only annoying to the patient, but utterly useless if not injurious.

An abundance of fresh air should be admitted to the room, but the patient should be protected from direct draughts.

All bed and body clothing, before being removed from the room should be placed in an antiseptic solution and allowed to soak for a period of three hours before being washed.

For this purpose use a solution made by dissolving one-quarter of a pound of Chlorinated Lime (Bleaching Powder) in eight gallons of water.

All eating utensils should be scalded before being used by others and the remnants of food burned.

None but those actually in attendance upon the patient should be permitted to enter the sick room or come in contact with the patient.

Upon recovery as manifested by a perfectly smooth skin and scalp, the patient should be given an antiseptic bath, as directed by the doctor, paying particular attention to the disinfection of the hair and scalp.

The antiseptic bath may be prepared by dissolving two

Bichloride of Mercury tablets to the gallon of hot water (about 1-4000), this to be followed by a plain soap and water bath. After bathing, the patient should be wrapped in a clean sheet, handed from without, and step into a clean room to dress.

After the recovery, death or removal of the patient, the sick room and every thing it contains, should be disinfected with Formaldehyde gas. This gas may be liberated by the addition of an officinal (U. S. P.) solution of Formaldehyde to potassium permanganate. Six and one-half ($6\frac{1}{2}$) ounces by weight, of commercial potassium permanganate crystals is required for each pint of the Formaldehyde solution. This amount of chemicals is sufficient to disinfect a room ten feet square. In using Formaldehyde gas for disinfection, the air of the room should be both warm and moist. The latter may be accomplished by sprinkling the floor or by suspending wet sheets around the room.

Place the crystals in a tin, agate or iron pail, the capacity of which is over eight times the quantity of disinfectants to be used. This is necessary to prevent overflow of the solution due to effervescence.

The pail containing the crystals should be placed at the centre of the room, in a tub or dish pan with a non-conductor such as a stove lid or bricks under it, as considerable heat is given off on mixing the chemicals.

In the preparation of the room for such disinfection, it should be sealed with strips of gummed paper or surgeon's plaster, closing flues, ventilators, chimney places and all visible cracks and crevices about walls, doors and windows. Open up beds, stand mattresses on end, open closets, bureau drawers, trunks, etc., and spread their contents about the room.

Fabrics, especially carpets, bed and body clothing fully unfolded, should be suspended upon chairs, clothes-lines, bedsteads, etc., exposing all to the fumes of the gas.

When the room is properly sealed, quickly pour the For-

maldehyde solution upon the crystals from a wide-mouthed vessel, in order that it may be done quickly and make a hasty retreat.

Carefully seal the door of exit, including the key-hole and crevices about the door knob, and allow the room to remain closed at least six hours.

After disinfection soak bed and body clothing, etc., in a solution made by dissolving four (4) ounces of Chlorinated Lime (Chloride of Lime or Bleaching powder) in eight (8) gallons of water.

After remaining in this solution for three hours they should be removed and boiled.

After the necessary cleaning the windows should be opened and the room thoroughly aired for two days before it is again occupied.

As disinfectant agents are poisonous when taken internally, such drugs and solutions should always be plainly labelled and kept out of the reach of children.

Those suffering from this disease will not be permitted to attend school prior to the issuance of a certificate by the attending physician, or in cases where no physician has been in attendance, a certificate from the Health Officer which sets forth that all precautions have been observed to prevent the spread of the disease.

Other children in the households not contracting the disease at the end of twenty-one (21) days from the date of the first appearance of the disease in the house may return to school, provided they have not been exposed to the sick for that length of time.

The use of the word school, wherever it occurs in the regulations of the Department shall mean public, private, parochial, Sunday or other school.

ORDER OF RELIEF.

Form of Application or Poor Relief. †

To
 Directors of the Poor.....in the county of.....
 State of Pennsylvania.

Greeting:

Whereas, information has been given to the subscribers,
 two of the Justices of the Peace in and for the County afore-
 said, byof the Township, of.....
 that.....of the said Township. has been since
 the.....day of.....190 , affected with.....
 a communicable disease, and that the said.....
 is so poor as to be unable to procure the necessary assist-
 ance.

You are hereby authorized and required to take charge of
 the said.....and to furnish.....
 such medical and other relief as.....distressed
 situation may call for.

Given under our hands and seals the.....day of
A. D. 190 .

.....
 J. P.

.....
 J. P.

Vaccination Certificates.

FORM 10.

I hereby certify that on the.....day of.....190
 I vaccinated
 Age Address
 and that on theday of.....190 I find a resulting
 sore, which in my opinion means a successful vaccination.
M. D.
 Address

All certificates bearing date after Sept. 15, 1905, must be in above form.

FORM 11.

I hereby certify that on the.....day of.....190
 I examined a cicatrix on
 Age Address
 and believe it to be the result of a successful vaccination.
M. D.
 Address

All certificates bearing date after Sept. 15, 1905, must be in above form.

FORM 12.

I hereby certify that on the.....day of.....190
 I examined
 Age Address
 and found well defined cicatrices from smallpox.
M. D.
 Address

All certificates bearing date after Sept. 15, 1905, must be in above form.

Health Officer's Notification of Communicable Diseases.

To the Superintendent of theSunday school in
township. You are hereby notified
 thatexists on the premises of.....
 intownship.

All persons residing on the above named premises shall
 be excluded from your Sunday school until a certificate of
 disinfection issued by the Health Officer is presented.

By order of the Department of Health,

.....
Health Officer.

.....
P. O. Address.

.....190

Health Officer's Notification of Communicable Diseases.

ToLibrarianLibrary
.....Township. You are hereby notified that
.....exists on the premises of.....,
.....Township.

For this reason no books shall be loaned to persons living on these premises until a certificate of disinfection issued by the Health Officer is presented.

All library books now on the premises will be burned unless it is possible to thoroughly disinfect them by means of steam under pressure.

By order of the Department of Health,

.....
Health Officer.

.....
P. O. Address.

.....190

Health Officer's Notification of Communicable Diseases.

To the teacher of.....school,
.....Township. You are hereby notified that.....exists on the premises oftownship.

All persons residing on the above mentioned premises

shall be excluded from school until a certificate of disinfection issued by the Health Officer is presented.

By order of the Department of Health,

.....
Health Officer.

.....
P. O. Address.

.....190

Quarantine Permit.

This is to certify that.....
has permission to enter and leave the premises of.....
..... Township,
upon which.....exists under
the conditions set forth in the Regulations of the Department of Health.,

By order of the Department of Health,

.....
Health Officer.

.....
P. O. Address.

.....190

Health Officers' Application for Disinfectants and Placards

.....190

Commissioner of Health,
Harrisburg, Pa.

Dear Sir:—

Please forward to me at.....
the following disinfectants, in the quantities indicated,

Formaldehyde solution
 Permanganate of Potash,
 Chlorinated Lime
 Carbolic Acid
 Bichloride of Mercury.....

Health Officer.

P. O. Address.

.190

Commissioner of Health,
Harrisburg, Pa.

Dear Sir:—

Please forward to me at.....
..... placards Nos.....;
and circulars Nos.....

Health Officer.

P. O. Address.

Physician's Request for Disinfection.

To

Health Officer.

..... living at in
(Patient.)

..... Twp., has { fully recovered or from
 { died (Disease)

Please disinfect and release from quarantine and isolation.

..... M. D.

.....

P. O. Address.

Date

Note: Physician will please note rooms which should be disinfected.

.....

.....

.....

Health Officer's Certificate of Disinfection.

To whom it may concern:

This is to certify that the premises of in
..... Twp., within which
(Disease.)

recently existed were disinfected on 190..
as required by the State Department of Health.

.....Dist.

Health Officer.

.....

P. O. Address.

Note: Under the Act of June 18, 1895, no child or other person residing on above premises will be permitted to return to school prior to the expiration of 30 days after the date of this certificate in the following diseases; Cholera, Smallpox (Variola or Varioloid), Scarlet fever (Scarlatina or Scarlet rash), Diphtheria, (Diphtheritic or Membranous croup), Typhus fever, Yellow fever or Leprosy.

Monthly Report of Health Officers.

Number of reports of communicable disease received.....

Number of premises placarded.....

Number of premises quarantined.....

Number of disinfections performed: Rooms.....,

Houses, Wells Springs,

Privy vaults....., Miscellaneous.....

Total amount in cubic feet of air space disinfected.....

Total amount of disinfectants used:

Solution of Formaldehyde
 Permanganate of Potash
 Chlorinated Lime.....
 Carbolic Acid.....
 Bichloride of Mercury.....
 Sulphur
 Number of inspections made, to wit: .
 Bone Boiling Establishments.....
 Camps
 Collections of Stagnant Water.....
 Creameries,
 Dairies
 Dumping Grounds
 Factories and Mills,
 Fertilizer and Glue Works.....
 Manure Piles and Accumulations of Night Soil.....
 Piggeries and Pig-pens.....
 Schools
 Sewers
 Slaughter Houses
 Water Supplies

 Health Officer.

 P. O. Address.
 Month ending.....190 .

Health Officer's Report of Disinfection to County Medical Inspector.

When notified of the termination of a case of communicable disease and following the performance of disinfection, the Health Officer shall make a report of same to the County Medical Inspector on the following form:

On 190., Dr. of Pa. reported the from

(recovery or death.)

of living on the premises of in Twp. In accordance with the instructions of the Department of Health concerning such cases,

I removed placard and lifted quarantine Disinfected the following rooms

Regular certificate of disinfection was issued on day of 190...

Respectfully yours,

.....Dist.

Health Officer.

..... 190...

Date.

Report of Communicable Disease by Health Officer to County Medical Inspector.

Following the Health Officer's first visit to premises where a case of communicable disease exists he shall report what he has done to the County Medical Inspector on the following form:

.....
(Patient.) (P. O. Address.)

.....
(Township.) (Disease.)

..... Placarded on day of
(Reported by)

..... 190...

Established quarantine, number of
(Modified or absolute.) ..

Permits issued

Number of persons in household, Number
of rooms in dwelling,

Occupation of one or more in dwelling,

Is anything sold from the presises, if so, what?

Remarks:

(Note general condition of premises, existence of nuisances, etc., or any other action taken, such as issuing "Order of Relief," etc.)

.....Dist.

Health Officer.

Date,

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